WIND-TUNNEL STUDY OF TENSIONED MEMBRANE STRUCTURE

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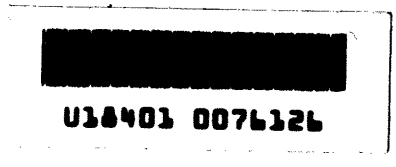

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LIST OF SYMBOLS

Symbol	Definition
U	Local mean velocity
D	Characteristic dimension (building height, width, etc.)
ν, ρ	Kinematic viscosity and density of approach flow
$\frac{UD}{\nu}$	Reynolds number
E	Mean voltage
A, B, n	Constants
U_{rms}	Root-mean-square of fluctuating velocity
E_{rms}	Root-mean-square of fluctuating voltage
U_∞	Reference mean velocity outside the boundary layer
X, Y	Horizontal coordinates
Z	Height above surface
δ	Height of boundary layer
T_u	Turbulence intensity $\frac{U_{rms}}{U_\infty}$ or $\frac{U_{rms}}{U}$
$C_{p_{mean}}$	Mean pressure coefficient, $\frac{(p-p_\infty)_{mean}}{0.5\ \rho\ U_\infty^2}$
$C_{p_{rms}}$	Root-mean-square pressure coefficient, $\frac{\left((p-p_\infty)-(p-p_\infty)_{mean}\right)_{rms}}{0.5\ \rho\ U_\infty^2}$
$C_{p_{max}}$	Peak maximum pressure coefficient, $\frac{(p-p_\infty)_{max}}{0.5\ \rho\ U_\infty^2}$
$C_{p_{min}}$	Peak minimum pressure coefficient, $\frac{(p-p_\infty)_{min}}{0.5\ \rho\ U_\infty^2}$
$(\ )_{min}$	Minimum value during data record
$(\ )_{max}$	Maximum value during data record

Symbol	Definition
p	Fluctuating pressure at a pressure tap on the structure
p_∞	Static pressure in the wind tunnel above the model
F_x, F_y	Forces in X, Y direction
A_R	Reference Area
CF_X	Force coefficient, X direction, $\frac{F_x}{A_R \; 0.5\rho \; U_\infty^2}$
CF_Y	Force coefficient, Y direction, $\frac{F_y}{A_R \; 0.5\rho \; U_\infty^2}$

1. INTRODUCTION

1.1 General

A significant characteristic of modern building design is lighter cladding and more flexible frames. These features produce an increased vulnerability of glass and cladding to wind damage and result in larger deflections of the building frame. In addition, increased use of pedestrian plazas at the base of the buildings has brought about a need to consider the effects of wind and gustiness in the design of these areas.

The building geometry itself may increase or decrease wind loading on the structure. Wind forces may be modified by nearby structures which can produce beneficial shielding or adverse increases in loading. Overestimating loads results in uneconomical design; underestimating may result in cladding or window failures. Tall structures have historically produced unpleasant wind and turbulence conditions at their bases. The intensity and frequency of objectionable winds in pedestrian areas is influenced both by the structure shape and by the shape and position of adjacent structures.

Techniques have been developed for wind tunnel modeling of proposed structures which allow the prediction of wind pressures on cladding and windows, overall structural loading, and also wind velocities and gusts in pedestrian areas adjacent to the building. Information on sidewalk-level gustiness allows plaza areas to be protected by design changes before the structure is constructed. Accurate knowledge of the intensity and distribution of the pressures on the structure permits adequate but economical selection of cladding strength to meet selected maximum design winds and overall wind loads for the design of the frame for flexural control.

Modeling of the aerodynamic loading on a structure requires special consideration of flow conditions in order to guarantee similitude between model and prototype. A detailed discussion of the similarity requirements and their wind-tunnel implementation can be found in references (1), (2), and (3). In general, the requirements are that the model and prototype be geometrically similar, that the approach mean velocity at the building site have a vertical profile shape similar to the full-scale flow, that the turbulence characteristics of the flows be similar, and that the Reynolds number for the model and prototype be equal.

These criteria are satisfied by constructing a scale model of the structure and its surroundings and performing the wind tests in a wind tunnel specifically designed to model atmospheric boundary-layer flows. Reynolds number similarity requires that the quantity UD/ν be similar for model and prototype. Since ν, the kinematic viscosity of air, is identical for both, Reynolds numbers cannot be made precisely equal with reasonable wind velocities. To accomplish this the air velocity in the wind tunnel would have to be as large as the model scale factor times the prototype wind velocity, a velocity which would introduce unacceptable compressibility effects. However, for sufficiently high Reynolds numbers ($>2\times10^4$) the pressure coefficient at any location on the structure will be essentially constant for a large range of Reynolds numbers. Typical values encountered are 10^7-10^8 for the full-scale and 10^5-10^6 for the wind-tunnel model. In this range acceptable flow similarity is achieved without precise Reynolds number equality.

1.2 The Wind-Tunnel Test

The wind-engineering study is performed on a building or building group modeled at scales ranging from 1:150 to 1:400. The building model

is constructed of clear plastic fastened together with screws. The structure is modeled in detail to provide accurate flow patterns in the wind passing over the building surfaces. The building under test is often located in a surrounding where nearby buildings or terrain may provide beneficial shielding or adverse wind loading. To achieve similarity in wind effects the area surrounding the test building is also modeled. A flow visualization study is first made (smoke is used to make the air currents visible) to define overall flow patterns and identify regions where local flow features might cause difficulties in building curtain-wall design or produce pedestrian discomfort.

The test model, equipped with pressure taps (200 to 600 or more), is exposed to an appropriately modeled atmospheric wind in the wind tunnel and the fluctuating pressure at each tap measured electronically. The model, and the modeled area, are rotated 10 or 15 degrees and another set of data recorded for each pressure tap. Normally, 24 or 36 sets of data (360 degrees of turning) are taken; however, when flow visualization or recorded data indicate high pressure regions of small azimuthal extent, data is obtained in smaller azimuthal steps.

Data are recorded, analyzed and processed by an on-line computerized data-acquisition system. Pressure coefficients of several types are calculated by the computer for each reading on each piezometer tap and are printed in tabular form as computer readout. Using wind data applicable to the building site, representative wind velocities are selected for combination with measured pressures on the building model. Integration of test data with wind data results in prediction of peak local wind pressures for design of glass or cladding and may include overall forces and moments on the structure (by floor if desired) for design of

the structural frame. Pressure contours are drawn on the developed building surfaces showing the intensity and distribution of peak wind loads on the building. These results may be used to divide the building into zones where lighter or heavier cladding or glass may be desirable.

Based on the visualization (smoke) tests and on a knowledge of heavy pedestrian use areas, a dozen or more locations may be chosen at the base of the building where wind velocities can be measured to determine the relative comfort or discomfort of pedestrians in plaza areas, near building entrances, near building corners, or on sidewalks. Usually a reference pedestrian position is also tested to determine whether the wind environment in the building area is better or worse than the environment a block or so away in an undisturbed area.

The following pages discuss in greater detail the procedures followed and the equipment and data collecting and processing methods used. In addition, the data presentation format is explained and the implications of the data are discussed.

2. EXPERIMENTAL CONFIGURATION

2.1 Wind Tunnel

Wind-engineering studies are performed in the Fluid Dynamics and Diffusion Laboratory at Colorado State University (Figure 1). Three large wind tunnels are available for wind loading studies depending on the detailed requirements of the study. The wind tunnel used for this investigation is shown in Figure 2. All tunnels have a flexible roof adjustable in height to maintain a zero pressure gradient along the test section. The mean velocity can be adjusted continuously in each tunnel to the maximum velocity available.

2.2 Model

In order to obtain an accurate assessment of local pressures using piezometer taps, models are constructed to the largest scale that does not produce significant blockage in the wind-tunnel test section. The models are constructed of 1/2 in. thick Lucite plastic and fastened together with metal screws. Significant variations in the building surface, such as mullions, are machined into the plastic surface. Piezometer taps (1/16 in. diameter) are drilled normal to the exterior vertical surfaces in rows at several or more elevations between the bottom and top of the building. Similarly, taps are placed in the roof and on any sloping, protruding, or otherwise distinctive features of the building that might need investigation.

Pressure tap locations are chosen so that the entire surface of the building can be investigated for pressure loading and at the same time permit critical examination of areas where experience has shown that maximum wind effects may be expected to occur. Locations of the pressure taps for this study are shown in Figure 3. Dimensions are

given both for full-scale building (in ft) and for model (in in.). The pressure tap numbers are shown adjacent to the taps.

The pressure tests are sometimes made in two stages. In the first stage measurements are made on the initial distribution of pressure taps. If it becomes apparent from the data that the loading on the building is being influenced by some unsuspected geometry of the building or adjacent structures, additional pressure taps are installed in the critical areas. The locations of the taps are selected so that the maximum loading can be detected and the area over which this loading is acting can be defined. Any added taps are also shown in Figure 3.

A circular area 750 to 2000 ft in radius depending on model scale and characteristics of the surrounding buildings and terrain is modeled in detail. Structures within the modeled region are made from styrofoam and cut to the individual building geometries. They are mounted on the turntable in their proper locations. Significant terrain features are included as needed. The model is mounted on a turntable (Figure 2) near the downwind end of the test section. Any buildings or terrain features which do not fit on the turntable are placed on removable pieces which are placed upwind of the turntable for appropriate wind directions. A plan view of the building and its surroundings is shown in Figure 4. The turntable is calibrated to indicate azimuthal orientation to 0.1 degree.

The region upstream from the modeled area is covered with a randomized roughness constructed using various sized cubes placed on the floor of the wind tunnel. Different roughness sizes may be used for different wind directions. Spires are installed at the test-section entrance to provide a thicker boundary layer than would otherwise be

available. The thicker boundary layer permits a somewhat larger scale model than would otherwise be possible. The spires are approximately triangularly shaped pieces of 1/2 in. thick plywood 6 in. wide at the base and 1 in. wide at the top, extending from the floor to the top of the test section. They are placed so that the broad side intercepts the flow. A barrier approximately 8 in. high is placed on the test-section floor downstream of the spires to aid in development of the boundary-layer flow.

The distribution of the roughness cubes and the spires in the roughened area was designed to provide a boundary-layer thickness of approximately 4 ft, a velocity profile power-law exponent similar to that expected to occur in the region approaching the modeled area for each wind direction (a number of wind directions may have the same approach roughness). A photograph of the completed model in the wind tunnel is shown in Figure 5. The wind-tunnel ceiling is adjusted after placement of the model to obtain a zero pressure gradient along the test section.

3. INSTRUMENTATION AND DATA ACQUISITION

3.1 Flow Visualization

Making the air flow visible in the vicinity of the model is helpful (a) in understanding and interpreting mean and fluctuating pressures, (b) in defining zones of separated flow and reattachment and zones of vortex formation where pressure coefficients may be expected to be high and (c) in indicating areas where pedestrian discomfort may be a problem. Titanium tetrachloride smoke is released from sources on and near the model to make the flow lines visible to the eye and to make it possible to obtain motion picture records of the tests. Conclusions obtained from these smoke studies are discussed in Sections 4.1 and 5.1.

3.2 Pressures

Mean and fluctuating pressures are measured at each of the pressure taps on the model structure. Data are obtained for 24 or 36 wind directions, rotating the entire model assembly in a complete circle. Seventy-six pieces of 1/16 in. I.D. plastic tubing are used to connect 76 pressure ports at a time to an 80 tap pressure switch mounted inside the model. The switch was designed and fabricated in the Fluid Dynamics and Diffusion Laboratory to minimize the attenuation of pressure fluctuations across the switch. Each of the 76 measurement ports is directed in turn by the switch to one of four pressure transducers mounted close to the switch. The four pressure input taps not used for transmitting building surface pressures are connected to a common tube leading outside the wind tunnel. This arrangement provides both a means of performing in-place calibration of the transducers and, by connecting this tube to a pitot tube mounted inside the wind tunnel, a means of automatically monitoring the tunnel speed. The switch is operated by means of a shaft projecting through

the floor of the wind tunnel. A computer-controlled stepping motor steps the switch into each of the 20 required positions. The computer keeps track of switch position but a digital readout of position is provided at the wind tunnel.

The pressure transducers used are setra differential transducers (Model 237) with a 0.10 psid range. Reference pressures are obtained by connecting the reference sides of the four transducers, using plastic tubing, to the static side of a pitot-static tube mounted in the wind tunnel free stream above the model building. In this way the transducer measures the instantaneous difference between the local pressures on the surface of the building and the static pressure in the free stream above the model.

Output from the pressure transducers is fed to an on-line data acquisition system consisting of a Hewlett-Packard 21 MX computer, disk unit, card reader, printer, Digi-Data digital tape drive and a Preston Scientific analog-to-digital converter. The data are processed immediately into pressure coefficient form as described in Section 4.3 and stored for printout or further analysis.

All four transducers are recorded simultaneously for 16 seconds at a 250 sample per second rate. The results of an experiment to determine the length of record required to obtain stable mean and rms (root-mean-square) pressures and to determine the overall accuracy of the pressure data acquisition system is shown in Figure 6. A typical pressure port record was integrated for a number of different time periods to obtain the data shown. Examination of a large number of pressure taps showed that the overall accuracy for a 16 second period is, in pressure coefficient form, 0.03 for mean pressures, 0.1 for peak pressures, and 0.01 for rms pressures. Pressure coefficients are defined in Section 4.3.

3.3 Velocity

Mean velocity and turbulence intensity profiles are measured upstream of the model to determine that an approach boundary-layer flow appropriate to the site has been established. Tests are made at one wind velocity in the tunnel. This velocity is well above that required to produce Reynolds number similarity between the model and the prototype as discussed in Section 1.1.

In addition, mean velocity and turbulence intensity measurements are made 5 to 7 ft (prototype) above the surface at a dozen or more locations on and near the building for 16 wind directions. The measurement locations are shown on Figure 4. The surface measurements are indicative of the wind environment to which a pedestrian at the measurement location would be subjected. The locations are chosen to determine the degree of pedestrian comfort or discomfort at the building corners where relatively severe conditions frequently are found, near building entrances and on adjacent sidewalks where pedestrian traffic is heavy, and in open plaza areas. In most studies a reference pedestrian position, located about a block away, is also tested. These data are helpful in evaluating the degree of pedestrian comfort or discomfort in the proposed plaza area in terms of the undisturbed environment in the immediate vicinity.

Measurements are made with a single hot-wire anemometer mounted with its axis vertical. The instrumentation used is a Thermo Systems constant temperature anemometer (Model 1050) with a 0.001 in. diameter platinum film sensing element 0.020 in. long. Output is directed to the on-line data acquisition system for analysis.

Calibration of the hot-wire anemometer is performed by comparing output with the pitot-static tube in the wind tunnel. The calibration

data are fit to a variable exponent King's Law relationship of the form

$$E^2 = A + BU^n$$

where E is the hot-wire output voltage, U the velocity and A, B, and n are coefficients selected to fit the data. The above relationship was used to determine the mean velocity at measurement points using the measured mean voltage. The fluctuating velocity in the form U_{rms} (root-mean-square velocity) was obtained from

$$U_{rms} = \frac{2\ E\ E_{rms}}{B\ n\ U^{n-1}}$$

where E_{rms} is the root-mean-square voltage output from the anemometer. For interpretation all turbulence measurements for pedestrian winds were divided by the mean velocity outside the boundary-layer U_∞. Turbulence intensity in velocity profile measurements used the local mean velocity.

4. RESULTS

4.1 Flow Visualization

A film is included as part of this report showing the characteristics of flow about the structure using smoke to make the flow visible. A listing of the contents of the film is shown in Table 1. Several features can be noted from the visualization. As with all large structures, wind approaching the building is deflected down to the plaza level, up over the structure and around the sides. A description of the smoke test results emphasizing flow patterns of concern relative to possible high-wind load areas and pedestrian comfort is given in Section 5.1.

4.2 Velocity

Velocity and turbulence profiles are shown in Figure 7. Profiles were taken upstream from the model which are characteristic of the boundary layer approaching the model and sometimes at the building site with building removed. The boundary-layer thickness, δ, is shown in Figure 7. The corresponding prototype value of δ for this study is also shown in the figure. This value was established as a reasonable height for this study. The mean velocity profile approaching the modeled area has the form

$$\frac{U}{U_\infty} = \left(\frac{z}{\delta}\right)^n .$$

The exponent n for the approach flow established for this study is shown in Figure 7.

Profiles of longitudinal turbulence intensity in the flow approaching the modeled area are shown in Figure 7. The turbulence intensities are appropriate for the approach mean velocity profile selected. For the velocity profiles, turbulence intensity is defined

as the root-mean-square about the mean of the longitudinal velocity fluctuations divided by the local mean velocity U,

$$Tu = \frac{U_{rms}}{U} .$$

Velocity data obtained at each of the pedestrian measurement locations shown in Figure 4 are listed in Table 2 as mean velocity U/U_∞, turbulence intensity U_{rms}/U_∞, and largest effective gust

$$U_{pk} = \frac{U + 3U_{rms}}{U_\infty} .$$

These data are plotted in polar form in Figure 8. Measurements were taken 5 to 7 ft above the ground surface. A site map is superimposed on the polar plots to aid in visualization of the effects of the nearby structures on the velocity and turbulence magnitudes. An analysis of these wind data is given in Section 5.2.

To enable a quantitative assessment of the wind environment, the wind-tunnel data were combined with wind frequency and direction information obtained at the local airport. Table 3 shows wind frequency by direction and magnitude obtained from summaries published by the National Weather Service. These data, usually obtained at an elevation of about 30-40 ft, were converted to velocities at the reference velocity height for the wind-tunnel measurements and combined with the wind-tunnel data to obtain cumulative probability distributions (percent time a given velocity is exceeded) for wind velocity at each measuring location. The percentage times were summed by wind direction to obtain a percent time exceeded at each measuring position independent of wind direction (but accounting for the fact that the wind blows from different directions with varying frequency). These results are plotted in Figure 9.

Interpretation of Figure 9 is aided by a description of the effects of wind of various magnitudes on people. The earliest quantitative description of wind effects was established by Sir Francis Beaufort in 1806 for use at sea and is still in use today. Several recent investigators have added to the knowledge of wind effects on pedestrians. These investigations along with suggested criteria for acceptance have been summarized by Penwarden and Wise (4) and Melbourne (5). The Beaufort scale (from ref. 4), based on mean velocity only, is reproduced as Table 4 including qualitative descriptions of wind effects. Table 4 suggests that mean wind speeds below 12 mph are of minor concern and that mean speeds above 24 mph are definitely inconvenient. Quantitative criteria for acceptance from reference 5 are superimposed as dashed lines on Figure 9. The peak gust curves shown in Figure 9 are the percent of time during which a short gust of the stated magnitude could occur (say about one of these gusts per hour). Implications of the data plotted in Figure 9 are presented in Section 5.2

Because some pedestrian wind measuring positions are purposely chosen at sites where the smoke tests showed large velocities of small spacial extent, the general wind environment about the structure may be less severe than one might infer from a strict analysis of Table 2 and Figure 9.

4.3 Pressures

For each of the pressure taps examined at each wind direction, the data record is analyzed to obtain four separate pressure coefficients. The first is the mean pressure coefficient

$$C_{p_{mean}} = \frac{(p-p_\infty)_{mean}}{0.5\ \rho\ U_\infty^2}$$

where the symbols are as defined in the List of Symbols. It represents the mean of the instantaneous pressure difference between the building pressure tap and the static pressure in the wind tunnel above the building model, nondimensionalized by the dynamic pressure

$$0.5\ \rho\ U_\infty^2$$

at the reference velocity position. This relationship produces a dimensionless coefficient which indicates that the mean pressure difference between building and ambient wind at a given point on the structure is some fraction less or some fraction greater than the undisturbed wind dynamic pressure near the upper edge of the boundary layer. Using the measured coefficient, prototype mean pressure values for any wind velocity may be calculated.

The magnitude of the fluctuating pressure is obtained by the rms pressure coefficient

$$C_{p_{rms}} = \frac{\left((p-p_\infty) - (p-p_\infty)_{mean}\right)_{rms}}{0.5\ \rho\ U_\infty^2}$$

in which the numerator is the root-mean-square of the instantaneous pressure difference about the mean .

If the pressure fluctuations followed a Gaussian probability distribution, no additional data would be required to predict the

frequency with which any given pressure level would be observed. However, the pressure fluctuations do not, in general, follow a Gaussian probability distribution so that additional information is required to show the extreme values of pressure expected. The peak maximum and peak minimum pressure coefficients are used to determine these values:

$$C_{p_{max}} = \frac{(p-p_\infty)_{max}}{0.5\ \rho\ U_\infty^2}$$

$$C_{p_{min}} = \frac{(p-p_\infty)_{min}}{0.5\ \rho\ U_\infty^2}$$

The values of $p-p_\infty$ which were digitized at 250 samples per second for 16 seconds, representing about one hour of time in the full-scale, are examined individually by the computer to obtain the most positive and most negative values during the 16-second period. These are converted to $C_{p_{max}}$ and $C_{p_{min}}$ by nondimensionalizing with the free stream dynamic pressure.

The four pressure coefficients are calculated by the on-line data acquisition system computer and tabulated along with the approach wind azimuth in degrees from true north. The list of coefficients is included as Appendix A. The pressure tap code numbers used in the appendix are explained in Figure 3.

To determine the largest peak loads acting at any point on the structure for cladding design purposes, the pressure coefficients for all wind directions were searched to obtain, at each pressure tap, the largest absolute value of peak pressure coefficient. Table 6 provides these pressure coefficients and associated wind directions. Included in Section 5.3 is an analysis of the coefficients of Table 6 including the maximum values obtained and where they occurred on the building.

The pressure coefficients of Table 6 can be converted to full-scale loads by multiplication by a suitable reference pressure selected for the field site. This reference pressure is represented in the equations for pressure coefficients by the $0.5\ \rho\ U_\infty^2$ denominator. This value is the dynamic pressure associated with an hourly mean wind at the reference velocity measurement position at the edge of the boundary layer. In general, the method of arriving at a design reference pressure for a particular site involves selection of a design wind velocity, translation of the velocity to an hourly mean wind at the reference velocity location and conversion to a reference pressure. Selection of the design velocity can be made from statistical analysis of extreme wind data or selected from wind maps contained in the proposed wind loading code ANSI A58.1 of the American National Standards Institute (6). The calculation of reference pressure for this study is shown in Table 5. The factor used in Table 5 to reduce gust winds to hourly mean winds is given in reference (7).

The reference pressure associated with the design hourly mean velocity at the reference velocity location can be used directly with the peak-pressure coefficients to obtain peak local design wind loads for cladding design. Local, instantaneous peak loads on the full-scale building suitable for cladding design were computed by multiplying the reference pressure of Table 5 by the peak coefficients of Table 6 and are listed as peak pressures in that table. The maximum psf load given at each tap location is the absolute value of the maximum value found in the tests, irrespective of its algebraic sign. For ease in visualizing the loads on the structure, contours of equal peak pressures for cladding load shown in Table 6 have been plotted on developed elevation

views of the structure, Figure 10. For control of water infiltration from outside to inside, the largest positive (inward-acting) pressure at each tap location is tabulated in Table 6.

For glass design pressures, a glass load factor is used to account for the different duration between measured peak pressures and the one minute loading commonly used in glass design charts. The design pressure used for glass is normally less than the peak pressures used for cladding design because of the static fatigue property of glass which can withstand higher pressures for short duration loads than for long duration loads. Recent research (8) indicates that the period of application of the peak pressures reported herein is about 5-10 seconds or less. If a glass design is based on these peak-pressure values, then a glass strength associated with this duration load should be used. Because glass design charts are normally based on some alternate load duration--usually one minute--then some reduction in peak loads should be made. An estimate of a load reduction factor can be obtained from an empirical relation of glass strength as a function of load duration. Current glass selection charts showing glass strength as a function of load duration (9) and older references (10) indicate the following load reduction factors:

	ref 9	ref 10
annealed float	0.80	0.81
heat strengthened	0.94	
tempered	0.97	0.98

Loadings appropriate for glass design can be computed by multiplying the peak-pressure loads of Table 6 by these load factors.

4.4 Forces and Moments

Force and moment coefficients in the X, Y and Z directions with the origin at the base of the fabric with the Z axis vertical may be computed for all wind directions tested, by integration of mean pressures on the structure. Overall forces and moments acting on the full-scale structure due to wind loading, which are useful in designing the proposed structure, may be obtained from use of these coefficients.

Force coefficients were computed at intervals along each axis for each wind direction using the equations shown below:

$$CF_X = \frac{F_X}{A_R 0.5\rho U_\infty^2} \qquad CF_Y = \frac{F_Y}{A_R 0.5\rho U_\infty^2} \qquad CF_Z = \frac{F_Z}{A_R 0.5\rho U_\infty^2}$$

Terms and symbols used in the equations are defined in the List of Symbols and the axes are defined for the structure in Figure 3. Force coefficients CF_X, CF_Y and CF_Z were computed for the forces acting along the X, Y and Z axes using the mean pressure coefficient at each pressure tap. A_R represents a constant reference area for nondimensionalization of the forces and moments.

The total forces acting on the full-scale structure along each axis for each wind direction were computed by multiplying the above coefficients by the appropriate full-scale reference area, by the reference pressure of Table 5, and by a gust load factor selected for an appropriate wind gust duration. The gust factor, shown in Table 5, was selected to increase the loads from an hourly mean load to that of a gust with duration sufficient for its effect to be fully felt by the structure. A table of gust load factors for various gust durations is incorporated in Table 5 so that force and moment data of Table 7 may be adjusted to a different load duration if desired.

The forces obtained along each axis were used to obtain load, shear, and moment diagrams for the structure for each wind direction. A shear and moment diagram was calculated for each of the three coordinate axes for each wind direction. The shear diagram, in kips, was obtained by algebraic sum of all forces in each coordinate direction acting beyond the coordinate location of interest. The load diagram, in psf, was obtained by dividing the force values by their contributing areas (listed in Table 7). The moment diagram, in ft-kips, was obtained by integration of the shear values so that the moment due to forces acting beyond the coordinate location of interest was calculated. The signs of moments were established by the right-hand rule.

Table 7 includes a summary of base shears for each coordinate direction and each wind direction. Each base shear was computed twice, by summing forces along two different axes. For example, the base shear in the X direction was computed as a sum of forces along the Z axis and again as a sum of forces along the Y axis. The two computed base shear values for a coordinate direction should ideally be equal for any wind direction. Deviance from equality results from the interpolation/extrapolation technique in the software used.

To estimate actual wind loads from a finite number of data points, the software used interpolates pressure values over the surface of the structure from known pressures at tap locations. The software first interpolates perpendicular to the axis it is summing along, and then parallel to it. For example, when finding X shears by summing forces along the Y axis, the software first interpolated data perpendicular to the Y axis (up-down) and then parallel to it (east-west). When finding X shears by summing along the Z axis, the software first

interpolated data perpendicular to the Z axis (east-west) and then parallel to it (up-down). This difference in the order of interpolation results in some deviation between base shears computed for the same coordinate direction and the same wind direction. The largest difference between computed shears was in the X direction, with the wall in place, at wind direction 0. This difference was 15.1 percent of the peak X shear for Configuration B (wall in place). The average difference in computed shears for a given configuration, coordinate direction and wind direction was 4.3 percent of the largest shear for the particular configuration and coordinate direction.

4.5 Simultaneous Pressures

Peak maximum and peak minimum pressure coefficients, $C_{P_{max}}$ and $C_{P_{min}}$ were determined as described in Section 4.3. In this separate analysis, however, the peak downward and peak upward acting pressure difference coefficients were found by calculating the largest instantaneous pressure difference across a pair of taps during a simulated one hour of wind. This pressure tap pair consists of one tap on the underside of the structure and the corresponding* tap directly above it on the upper side of the structure. These peak pressure difference coefficients are listed by wind direction and configuration in Appendix B. Downward-acting coefficients are maximums while upward-acting coefficients are minimums.

Table 8 contains a tabulation of peak downward (POS) and peak upward (NEG) acting pressure coefficients (columns 1 and 2) as defined in Section 4.3. Differences are formed from these maximum and minimum

*tap 201 corresponds to tap 101
tap 203 corresponds to tap 103, etc.

peak pressure coefficients for each pair of taps to obtain an estimate of the largest downward-acting peak pressure difference coefficient (column 3--i.e., tap 101 max - tap 201 min = 0.604 - (-1.033)) and largest upward-acting peak pressure difference coefficient (column 4--(i.e., tap 101 min - tap 102 max = -0.549 - 0.139 = -0.688). This estimate of peak pressure difference coefficient is conservative--large in magnitude--because the two peaks used in calculating columns 3 and 4 were not necessarily measured at the same instant in time. Also listed (columns 5 and 6) are the largest simultaneous peak downward (POS) and peak upward (NEG) acting pressure difference coefficients, independent of wind direction as found in Appendix B. A ratio of the peak difference coefficient (columns 3 and 4) to the simultaneous peak difference coefficient (columns 5 and 6) is shown in column 7 using the controlling (largest) peaks in each case. It should be noted that this ratio is approximately 1.2 or less for every set of taps. Thus, differences of peak coefficients may be used without undue conservatism.

5. DISCUSSION

5.1 Flow Visualization

Flow patterns identified with smoke showed no characteristics typical of large pressures. Flow over the top surface of the tensioned membrane structure separated from the surface, but without the large velocities normally required to generate high negative (outward from the surface) pressure magnitudes. Flow over the under side of the structure indicated a separated flow over essentially all that surface indicating, in general, small negative values of pressures (outward acting from the surface, or downward). Flow near the surface in pedestrian areas did not show areas of noticeably large velocities. The largest velocities appeared to be near the ends of the wall when it was in place in Configuration B.

5.2 Pedestrian Winds

Figure 4 shows the 15 locations selected for investigation of pedestrian wind comfort. Location 1 was selected as a reference location which should be reasonably undisturbed by presence of the structure. Each of the 15 locations was examined for both configurations (with and without the wall). Table 2 and Figure 8 show that the largest values of mean velocity were measured at locations 8 and 5 with no wall in place. Measured values ranged from 62 to 64 percent of the mean velocity, U_∞, at the boundary-layer height. These values compare to largest value of 50 percent of U_∞ measured at reference location 1 in an open area.

The largest values of fluctuating velocity, U_{rms}, were measured at locations 13 and 15 with the wall in place with values of 19 to 20 percent of U_∞. These values compare to a maximum value of 12 percent measured at reference location 1. The largest values of peak gust, represented by the mean plus three rms as discussed in Section 4.2, were measured at

locations 5 and 8 with no wall in place with values ranging from 98 to 108 percent of U_∞. The largest value measured at reference location 1 in an open area was 80 percent of U_∞.

Velocity data of Table 2 were integrated with wind data from the Los Angeles International Airport and the results presented in Figure 9. The Los Angeles data was selected as a "representative" site. Based on the data in this figure, the windiest location would be location 11 with the wall in place. This location would be uncomfortable 10 to 30 percent of the time for short-exposure activities but acceptable for walking. All other locations measured would be at least acceptable for short-exposure activities and many acceptable for long-exposure activities.

The results of the pedestrian wind analysis showed that the pedestrian wind environment under and near the tensioned-membrane structure should be acceptable with minor inconvenience at a few locations on windier days. Location of the structure at a windier site would, of course, cause a windier environment about the structure.

5.3 Pressures

Table 6 shows the largest pressure coefficients and corresponding loads measured on the structure for each pressure tap location. Data identified as Configuration A in Table 6 represent data obtained at all tap locations for 36 wind directions without the wall shown in Figures 3 and 5. Configuration B represents data obtained with the wall in place. The largest local peak pressure coefficient measured on the structure for each configuration was -1.55 for Configuration A and -1.60 for Configuration B--both measured at tap 126. These coefficients were referenced to the mean dynamic pressure of the approaching wind at 400 ft elevation. Two versions of Table 6 provide the peak pressure

in psf for positive peaks (pressures acting toward the fabric) and for negative peaks (pressures acting away from the fabric) for two different reference pressures. One, 17 psf, corresponds to a 70 mph fastest mile at 30 ft; the second, 1 psf, provides a convenient data base to scale to any other desired reference pressure (wind speed). All data were obtained in a simulated flow corresponding to a lightly built suburban terrain (mean velocity power law exponent of 0.20).

The pressure felt by the fabric is the vector sum of the pressures acting on the top and bottom of the fabric. An analysis of this net pressure loading was performed as described in Section 4.5 using data obtained simultaneously on the top and bottom side of the fabric. Table 8 shows the peak instantaneous pressures obtained by vector sum of top and bottom pressures at each point in time (columns 5 and 6). Also shown are the vector sums of peak pressures from top and bottom sides where the peaks may occur at different times (columns 3 and 4). In this table, a negative net pressure acts upward and a positive net pressure acts downward. The ratio of the largest peak from columns 3 or 4 (underlined peak) to the largest peak from columns 5 or 6 is shown in column 7. This column indicates that net peak pressures obtained from time-independent assessment of top side peaks and bottom side peaks overestimates the actual net peak pressure obtained from simultaneous measurements by only 10 to 20 percent in most cases.

Figure 10 shows contour plots of peak positive, peak minimum and mean pressure coefficients for both Configurations A and B for the wind direction (330) giving the largest values of peak minimum and the peak positive and peak minimum pressure coefficients regardless of wind direction for each configuration.

Tabulations of shear acting on the structure obtained by integration of mean pressures and multiplication by a gust factor are listed in Table 7. Integrations were performed in two ways for each case to assess the error involved in integrating over the curved surface. Mean differences in integration were about 4.5 percent with the largest difference 15 percent. This indicates an acceptable level of accuracy in integration of pressures over the curved surface.

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FIGURES

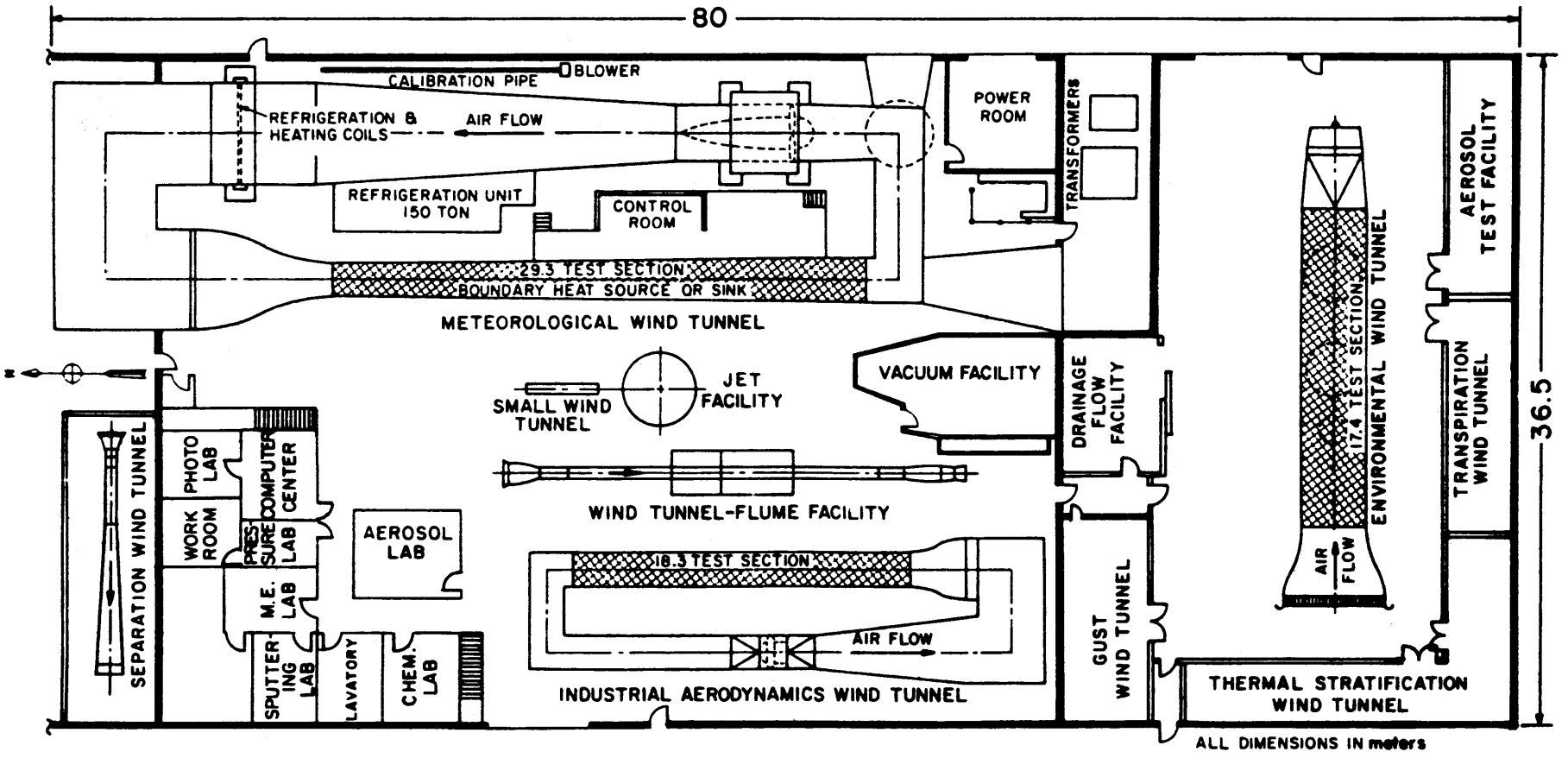
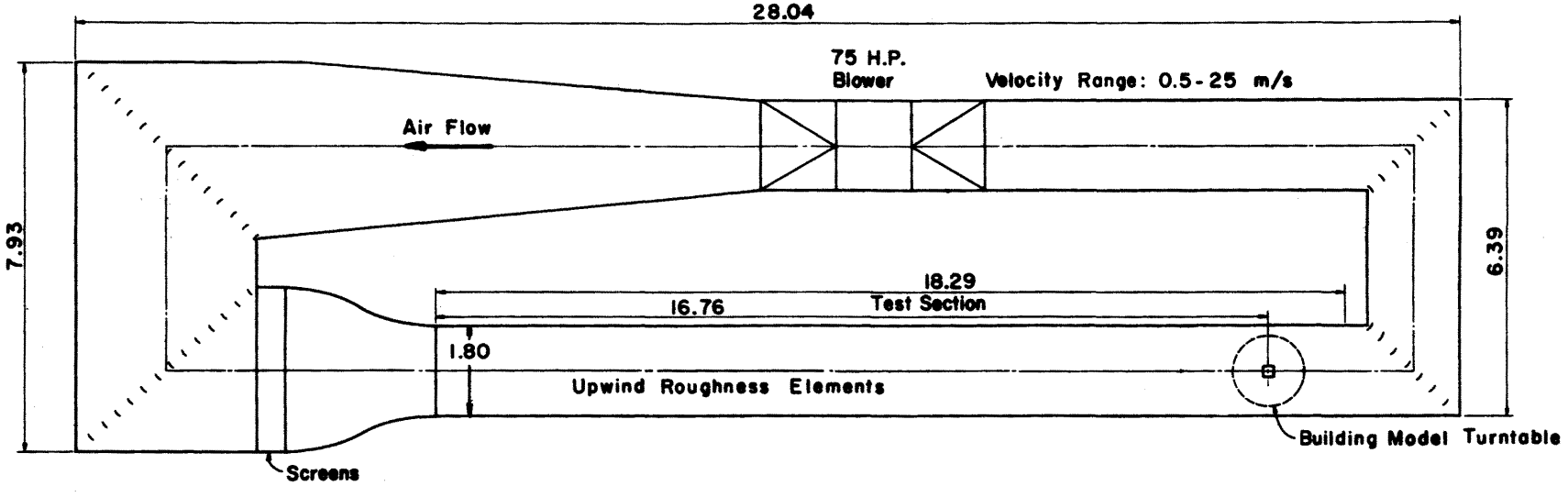
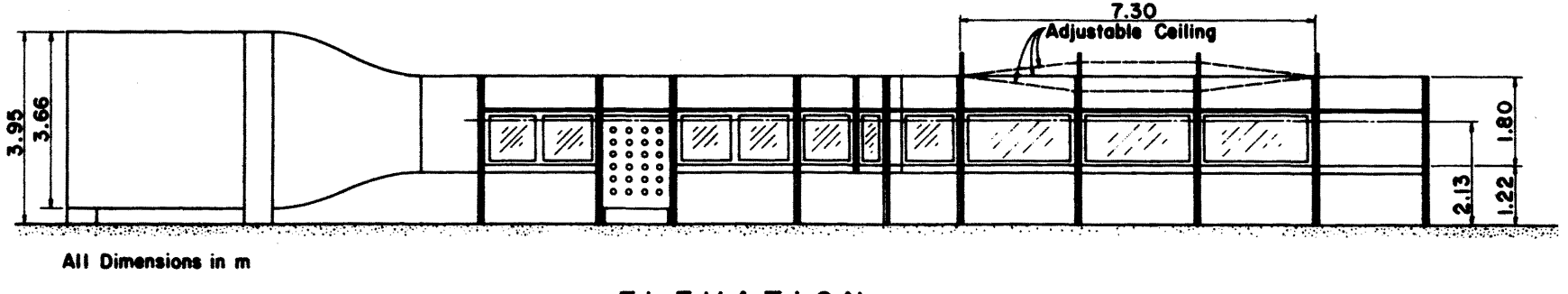


Figure 1. **FLUID DYNAMICS AND DIFFUSION LABORATORY COLORADO STATE UNIVERSITY**



PLAN



ELEVATION

INDUSTRIAL AERODYNAMICS WIND TUNNEL

Figure 2 - Wind-Tunnel Configuration

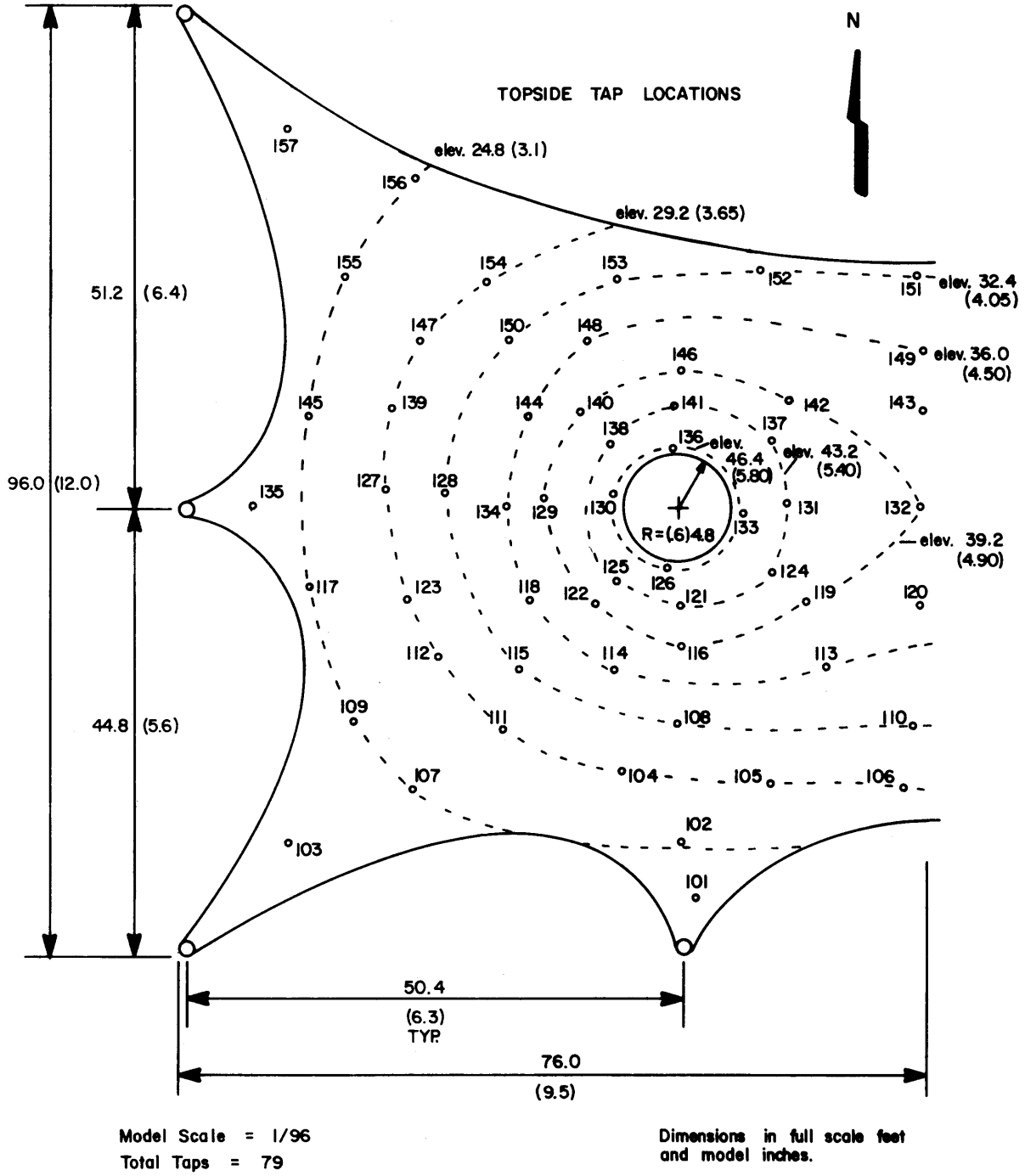


Figure 3a. Pressure Tap Locations

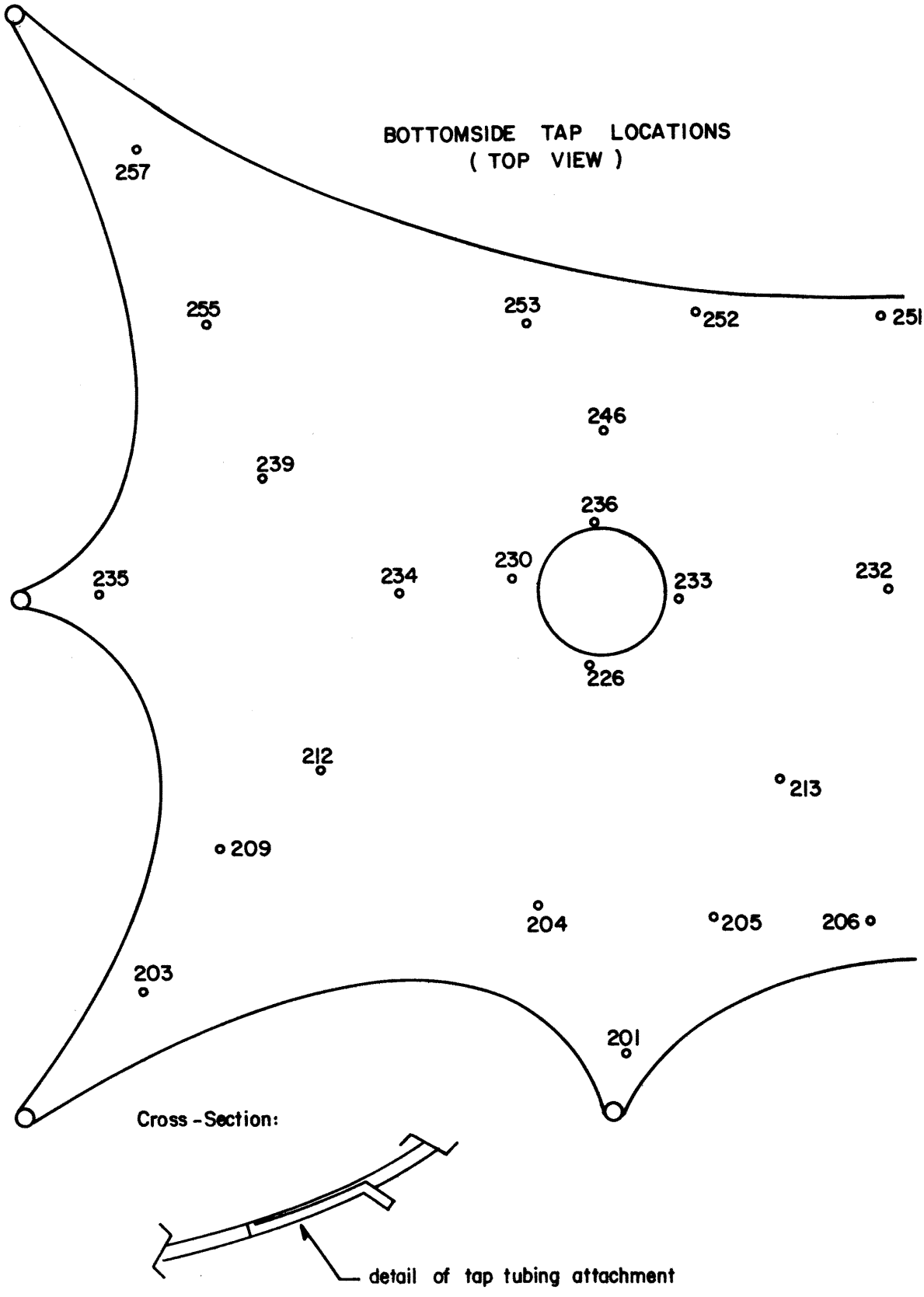


Figure 3b. Pressure Tap Locations

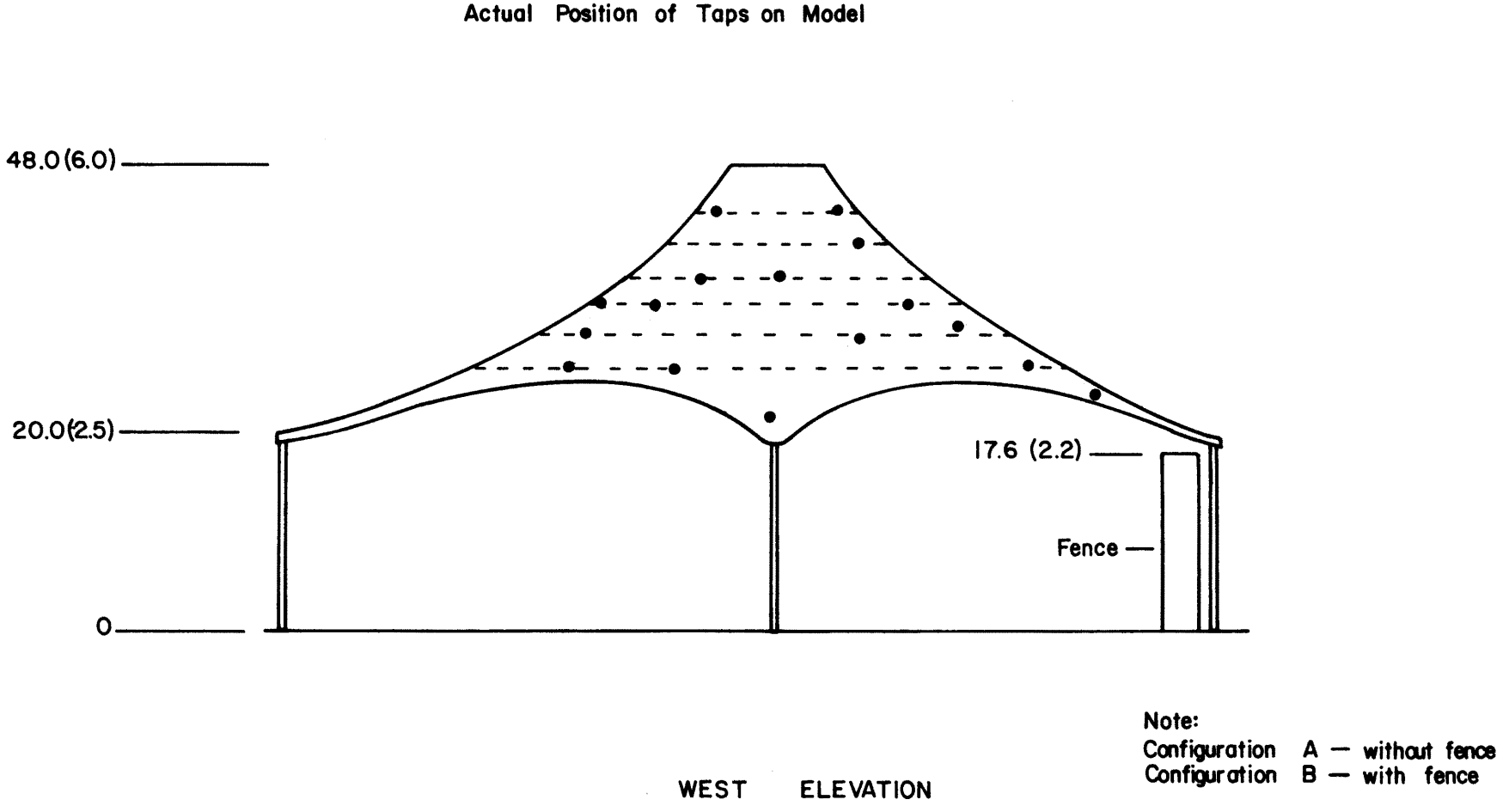


Figure 3c. Pressure Tap Locations

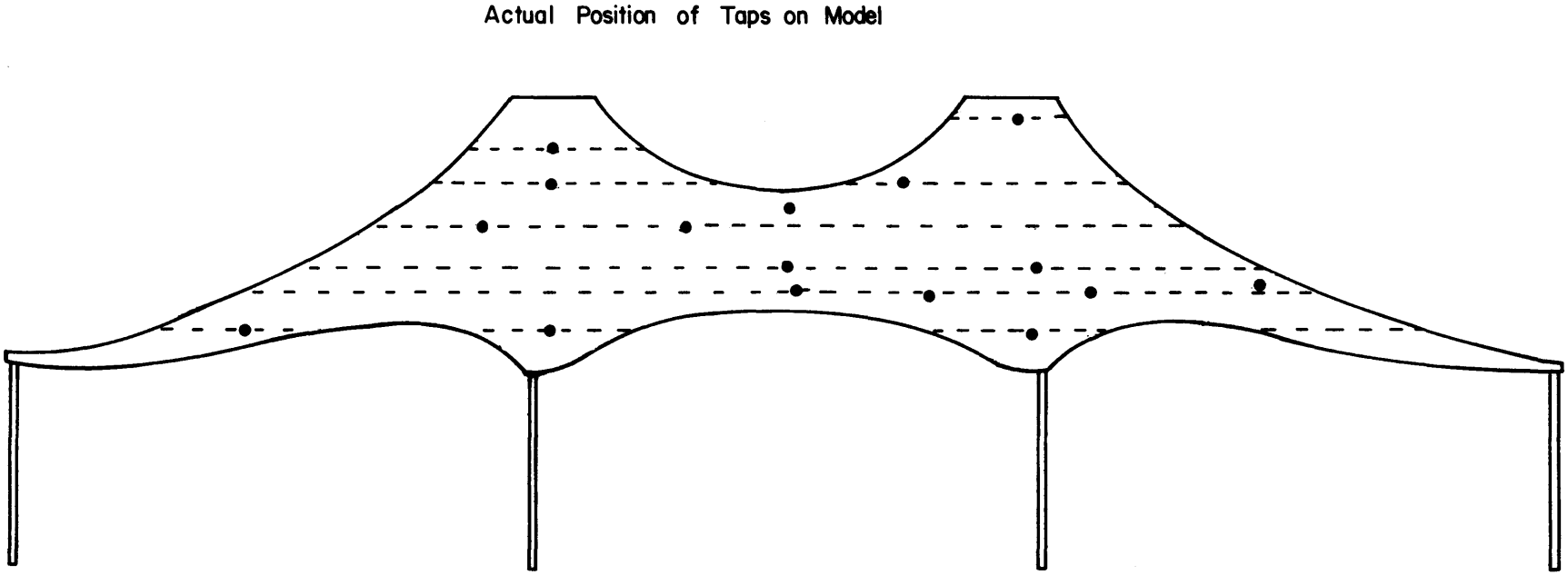


Figure 3d. Pressure Tap Locations

TAP LOCATIONS (relative to X, Y axis)

Tap No.	X Distance (model inches)	Y Distance (model inches)
101, 201	0.7	3.0
102	1.3	3.1
103, 203	1.3	8.1
104, 204	2.0	3.8
105, 205	2.0	1.9
106, 206	2.0	0
107	2.0	6.6
108	2.8	3.1
109, 209	2.8	7.2
110	2.8	0
111	2.8	5.4
112, 212	3.5	6.2
113, 213	3.5	1.4
114	3.5	4.1
115	3.5	5.2
116	3.9	3.2
117	4.3	7.8
118	4.3	5.0
119	4.3	1.5
120	4.3	0
121	4.3	3.2
122	4.3	4.3
123	4.3	6.7
124	4.6	2.1
125	4.6	4.0
126, 226	4.6	6.2
127	5.5	6.8
128	5.5	6.1
129	5.5	4.8
130	5.5	4.0
131	5.5	1.8
132, 232	5.5	0.3
133, 233	5.5	2.3
134, 234	5.5	5.4
135, 235	5.5	0.6
136, 236	6.5	3.3
137	6.5	2.1
138	6.5	4.1
139, 239	6.7	6.7
140	6.7	4.3
141	6.7	3.2
142	6.7	1.3
143	6.7	0
144	6.7	5.1
145	6.7	7.9
146, 246	7.4	3.2
147	7.6	6.4
148	7.6	4.3
149	7.6	0.1
150	7.6	5.4
151, 251	8.6	0.2
152, 252	8.6	2.2
153, 253	8.6	4.0
154	8.6	5.7
155, 255	8.6	7.4
156	9.7	6.5
157, 257	10.3	8.1

The following taps were located in a mirror image position on the east half of the model (see Section 5.3).

102, 202	129
104, 204	130
105, 205	131
108	133, 233
109, 209	137
112, 212	139, 239
117	140
118	141
119	147
126, 226	148
127	156
128	157, 257

Figure 3e. Pressure Tap Locations

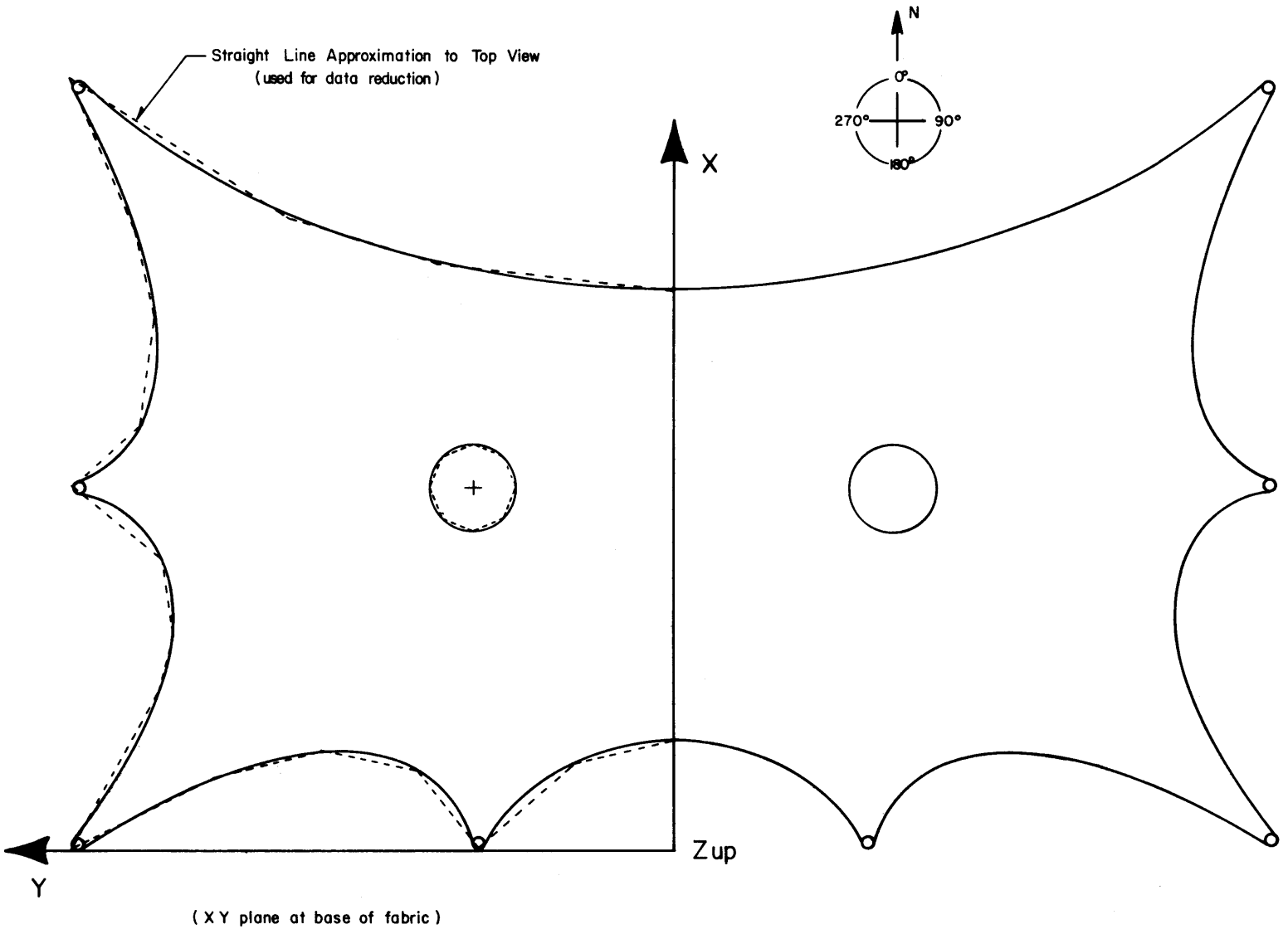


Figure 3f. Force and Moment Coordinate System

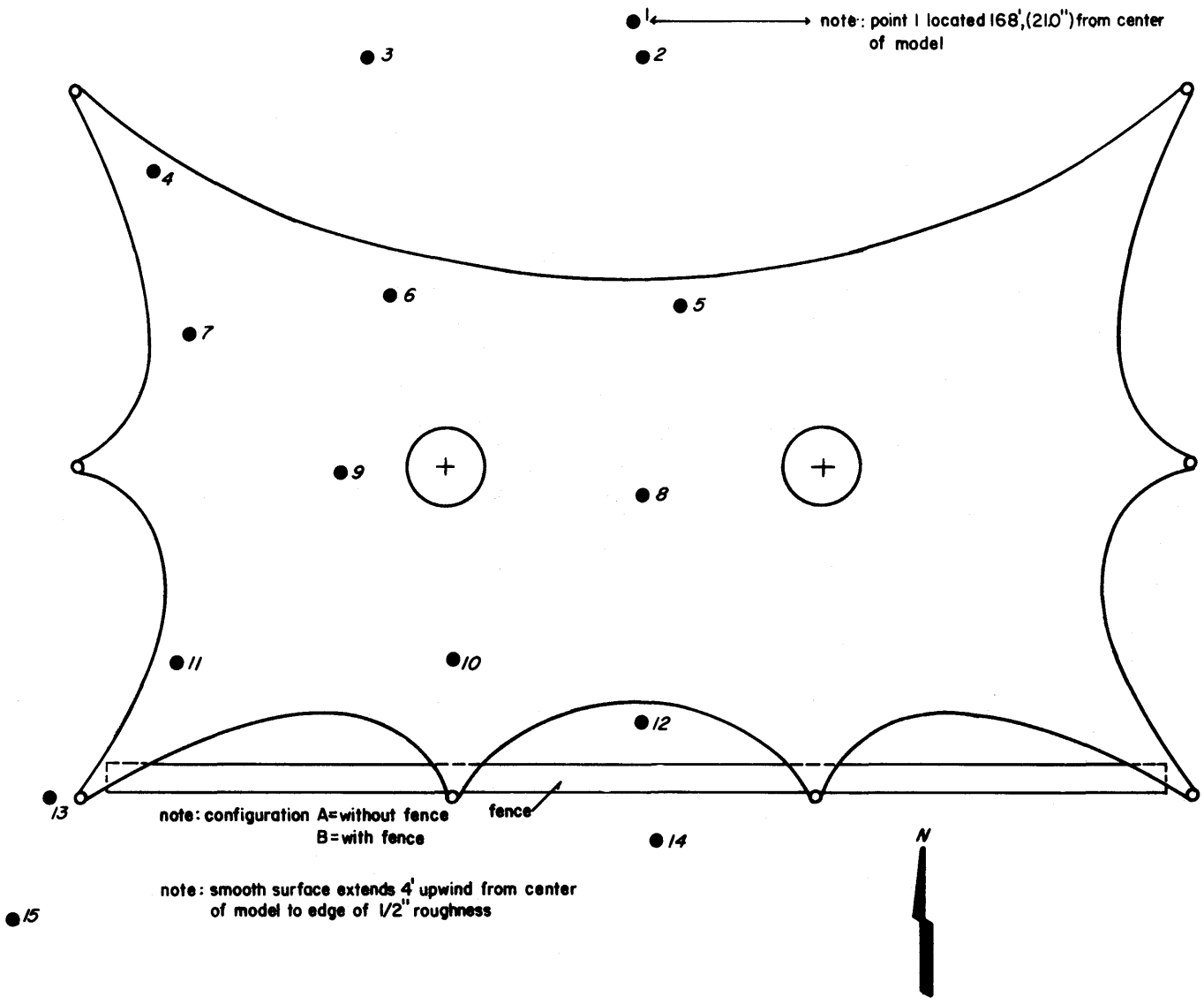
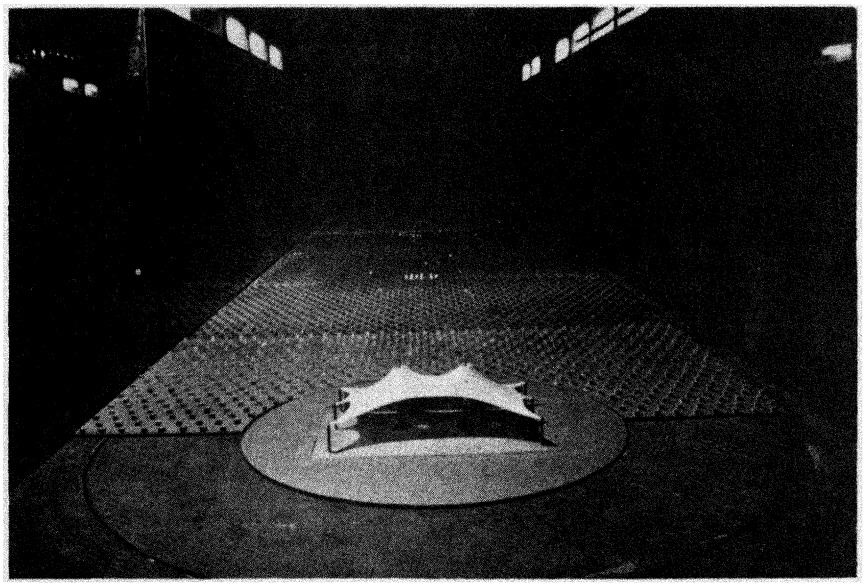
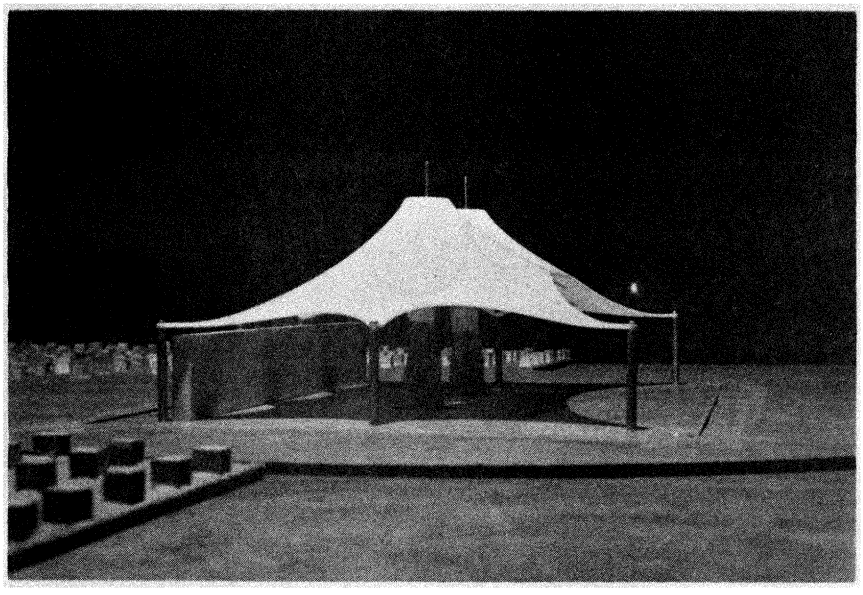


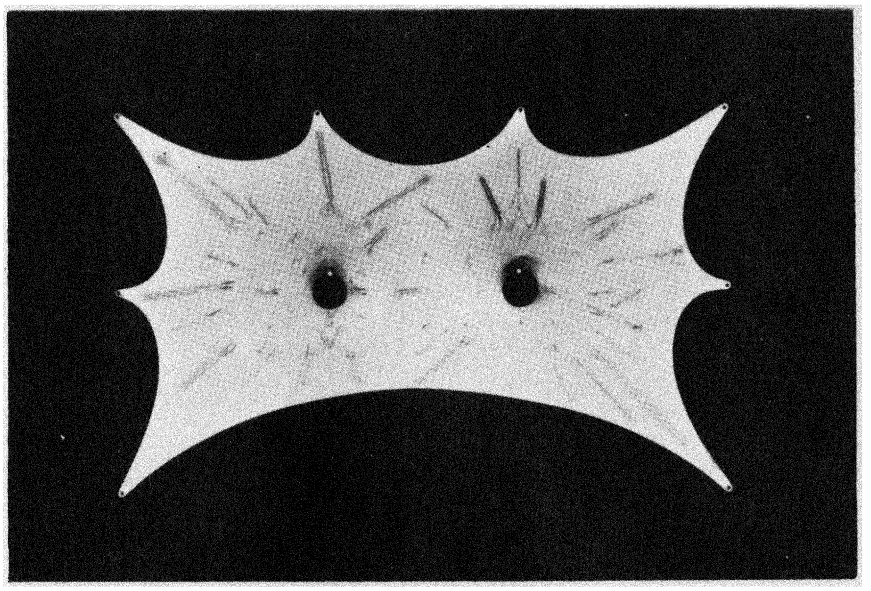
Figure 4. Model Location and Pedestrian Wind Velocity Measuring Positions

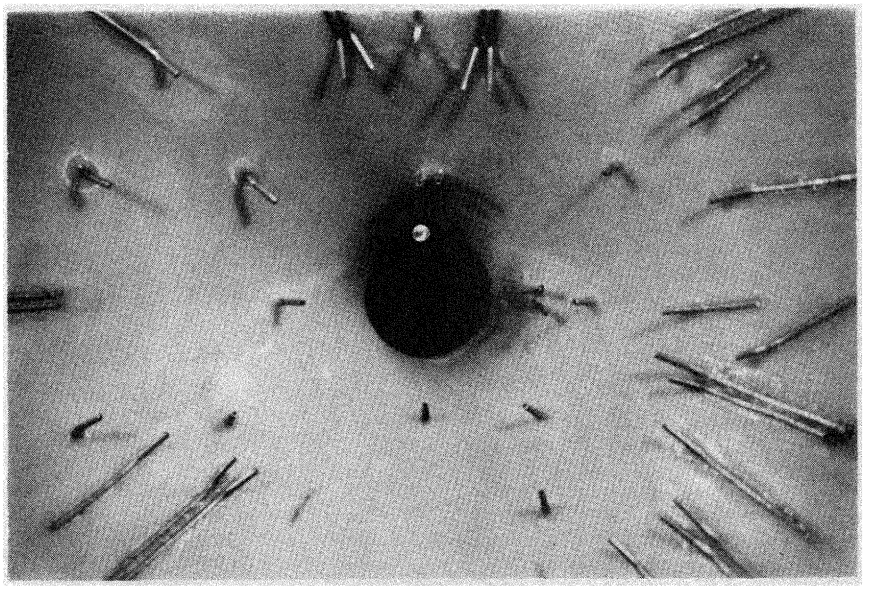




Configuration A- Without Wall
Configuration B- With Wall

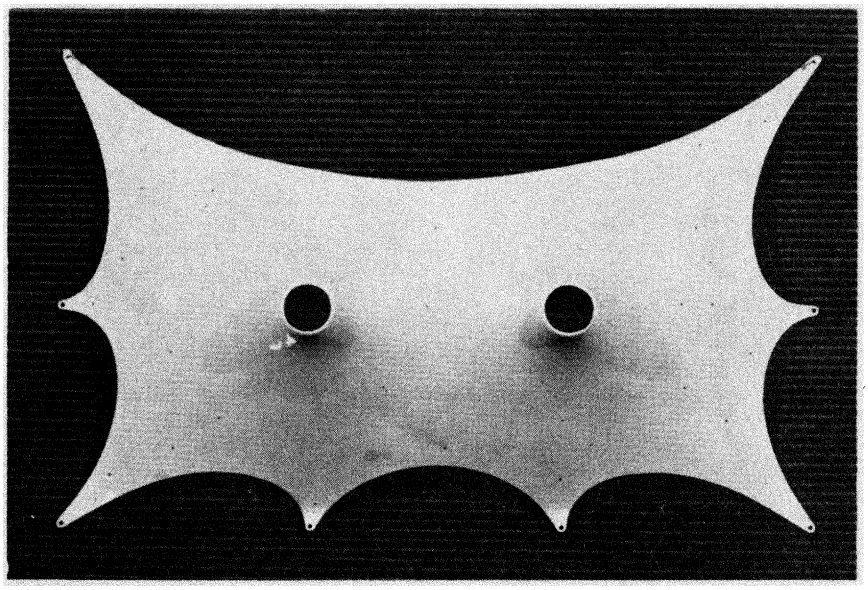
Figure 5. Completed Model in Wind Tunnel





Underside of Model

Figure 5. Completed Model in Wind Tunnel



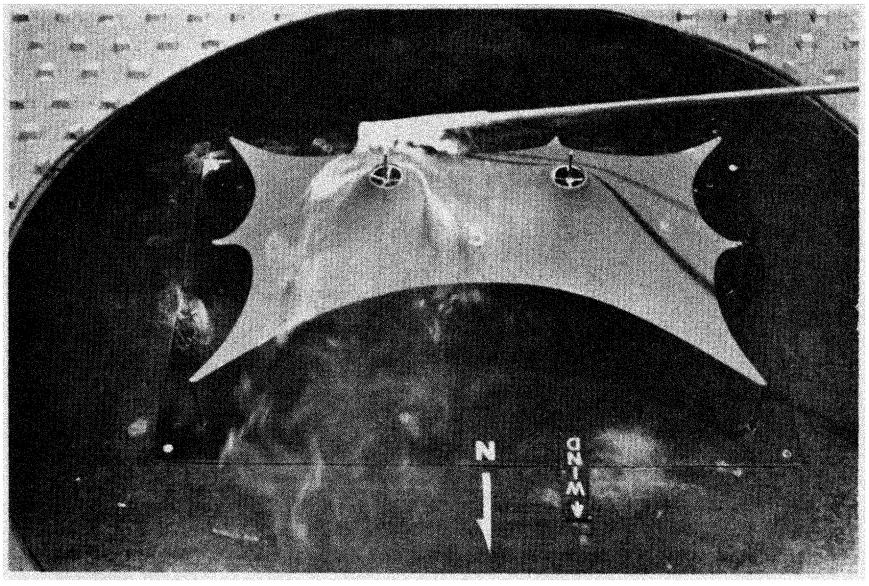


Figure 5. Completed Model in Wind Tunnel

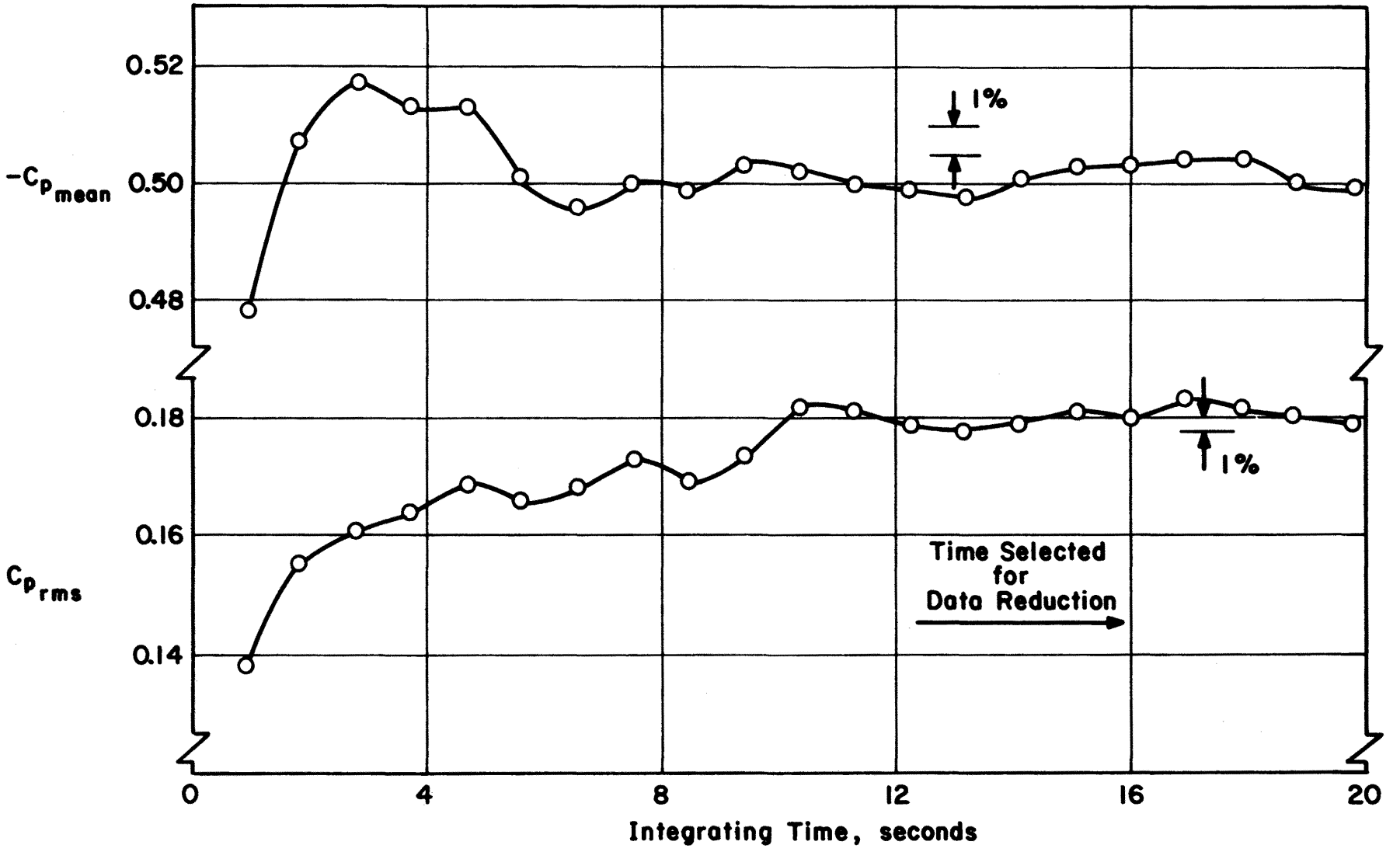


Figure 6 - Data Sampling Time Verification

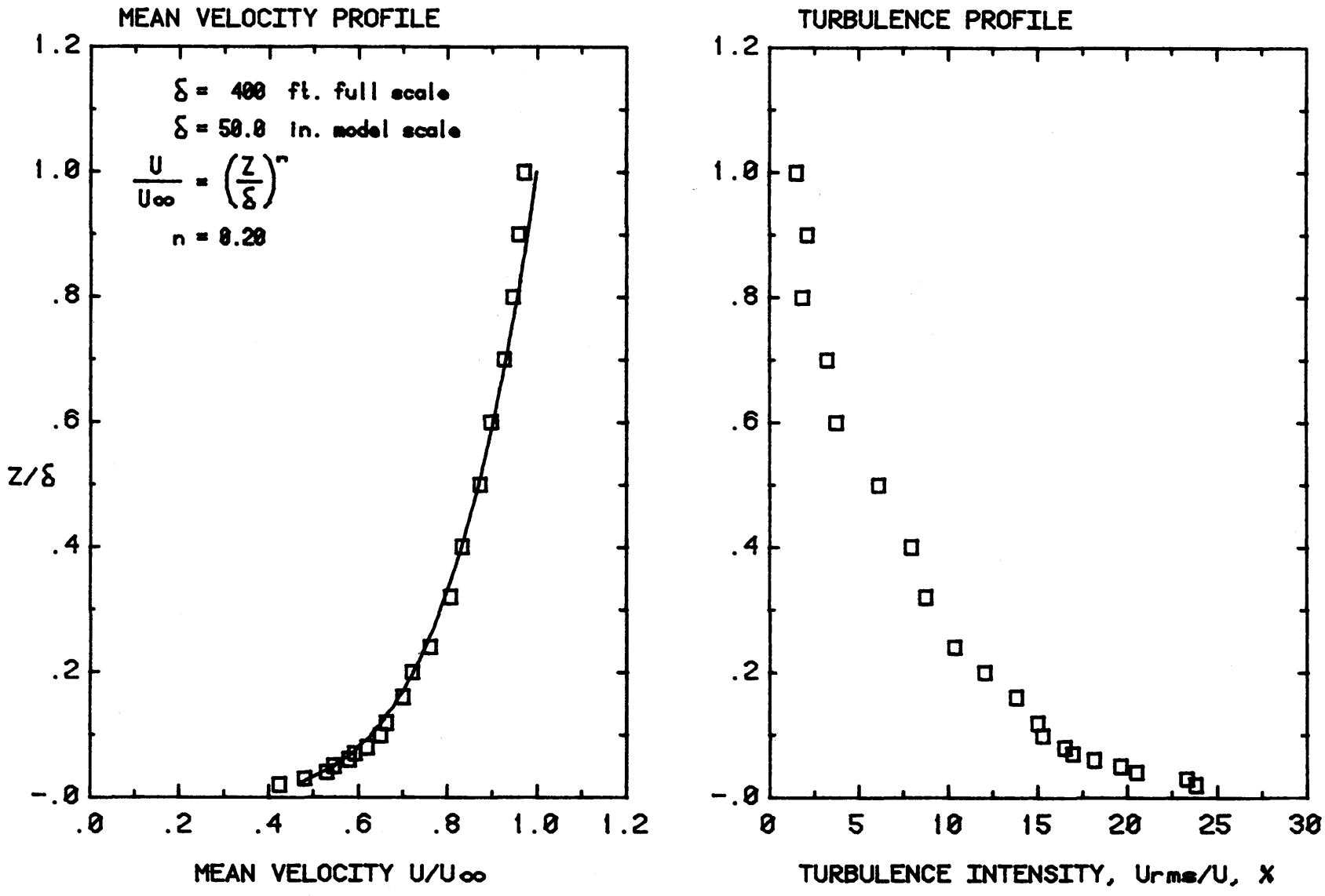


Figure 7. Mean Velocity and Turbulence Profiles Approaching the Model

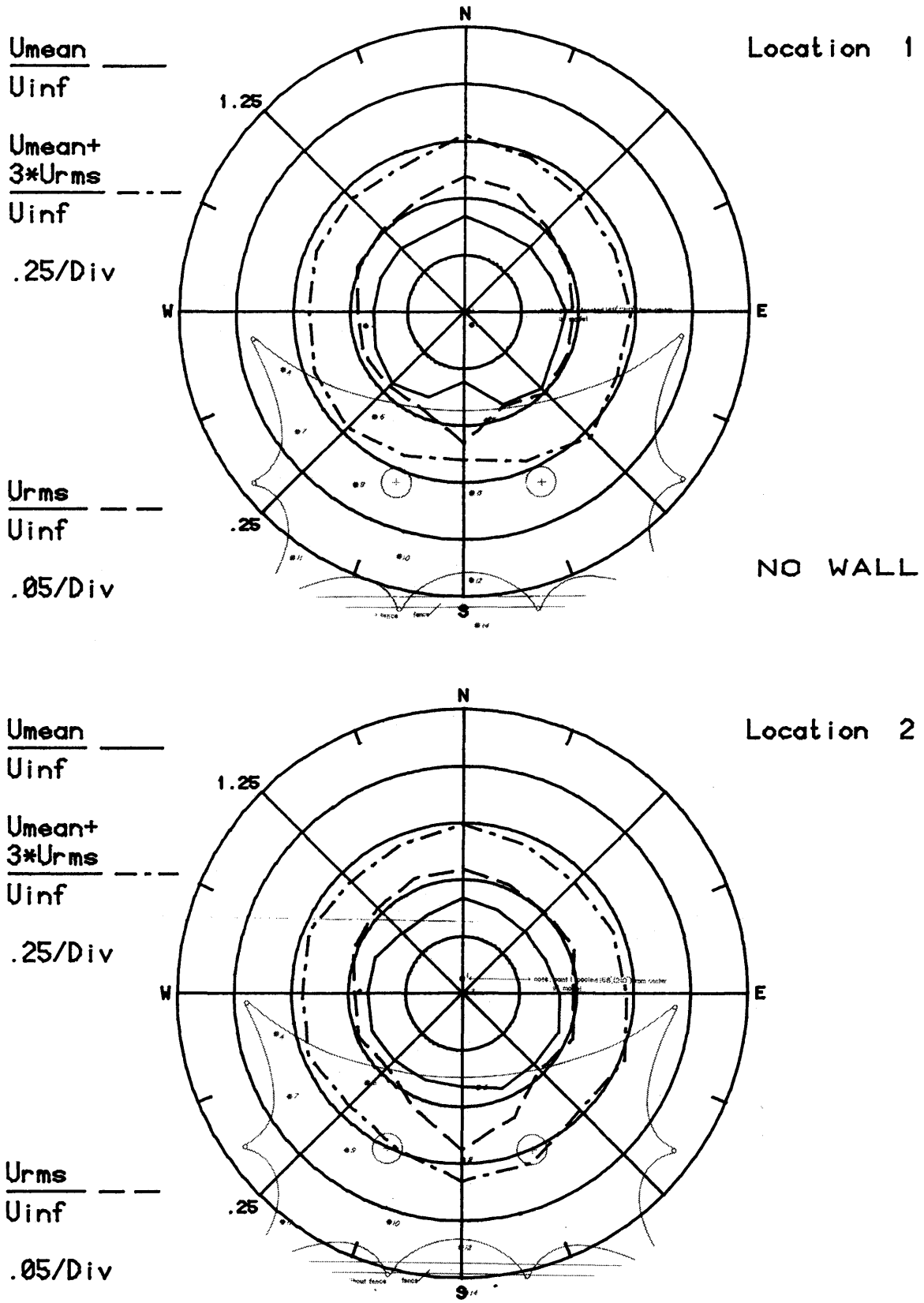
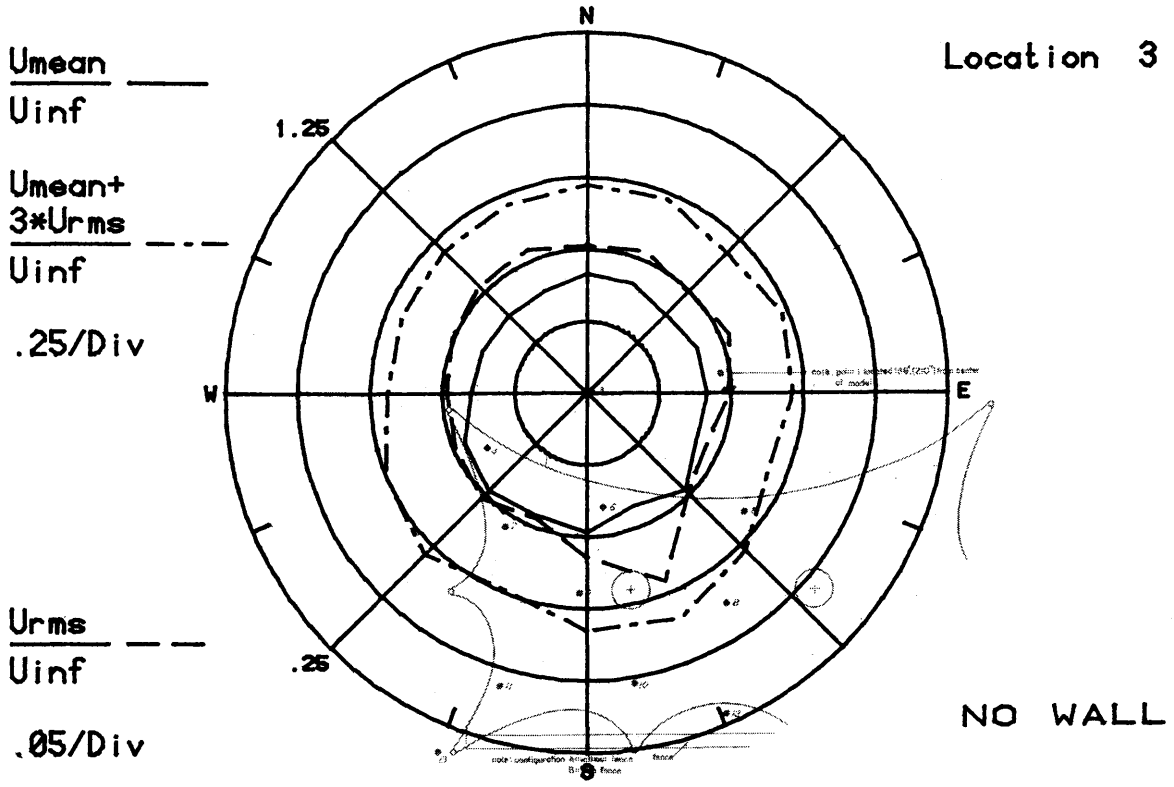


Figure 8a. Mean Velocities and Turbulence Intensities at Pedestrian Locations 1 and 2



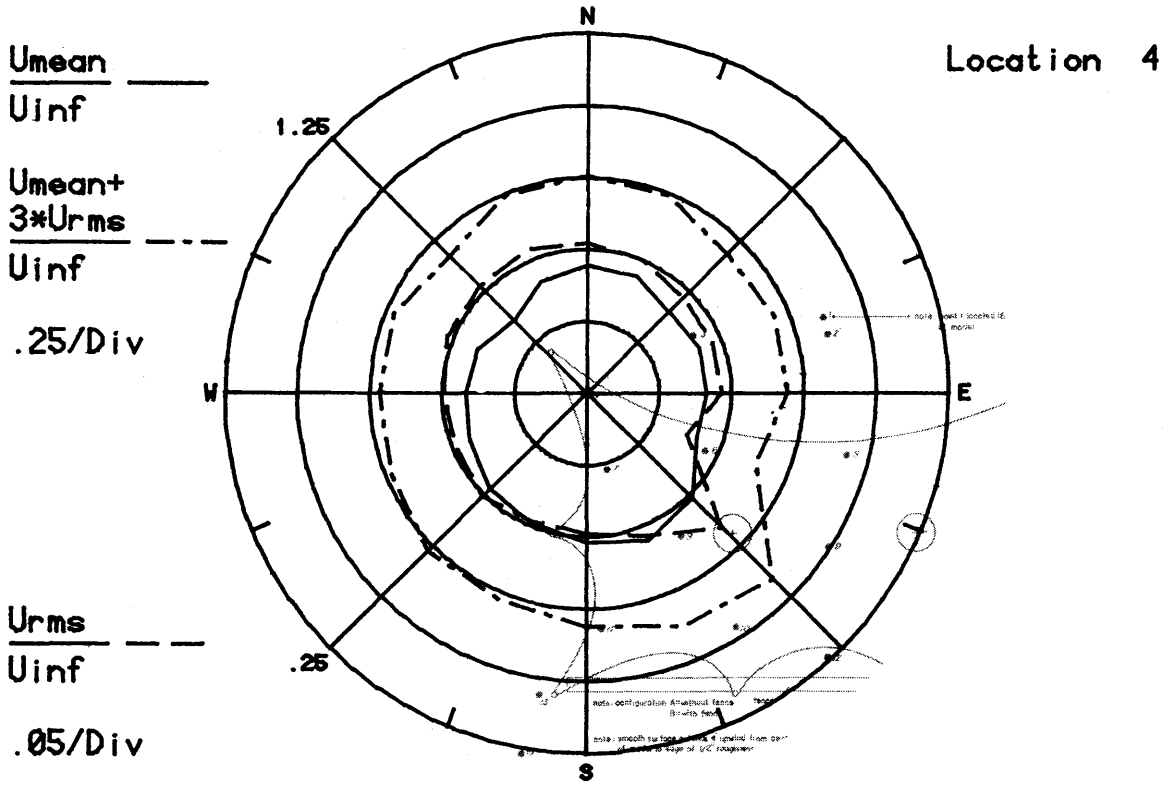


Figure 8b. Mean Velocities and Turbulence Intensities at Pedestrian Locations 3 and 4

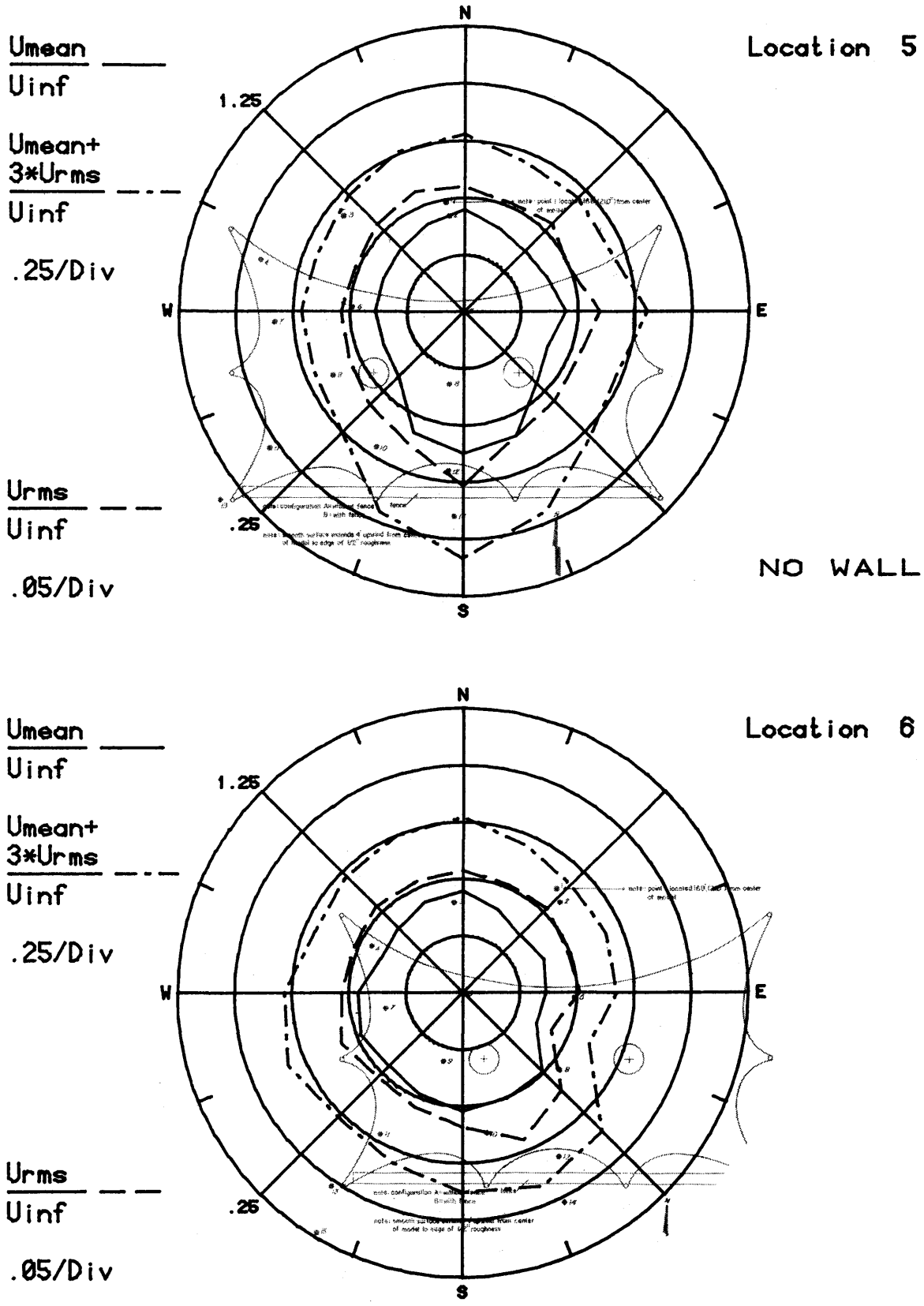


Figure 8c. Mean Velocities and Turbulence Intensities at Pedestrian Locations 5 and 6

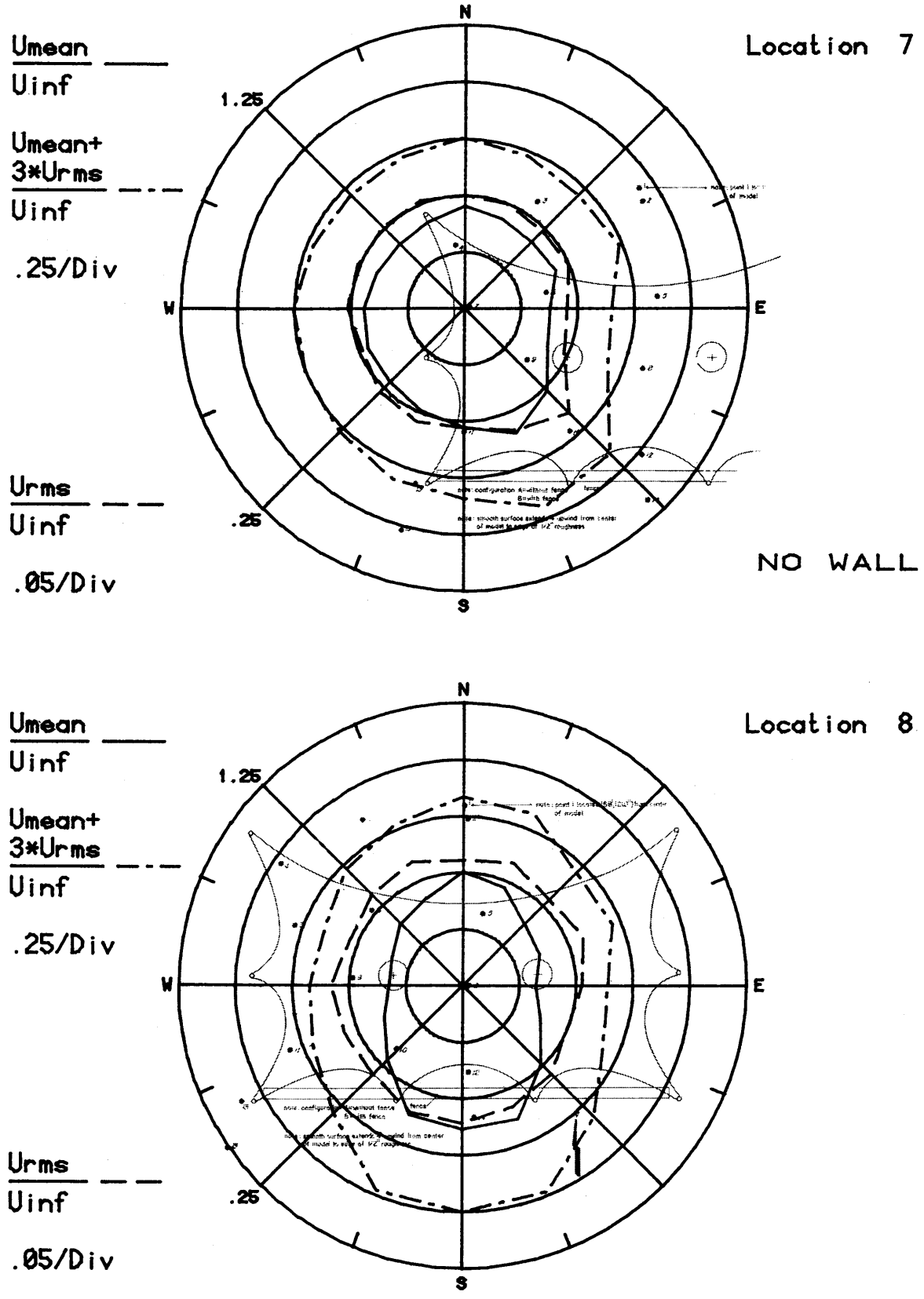
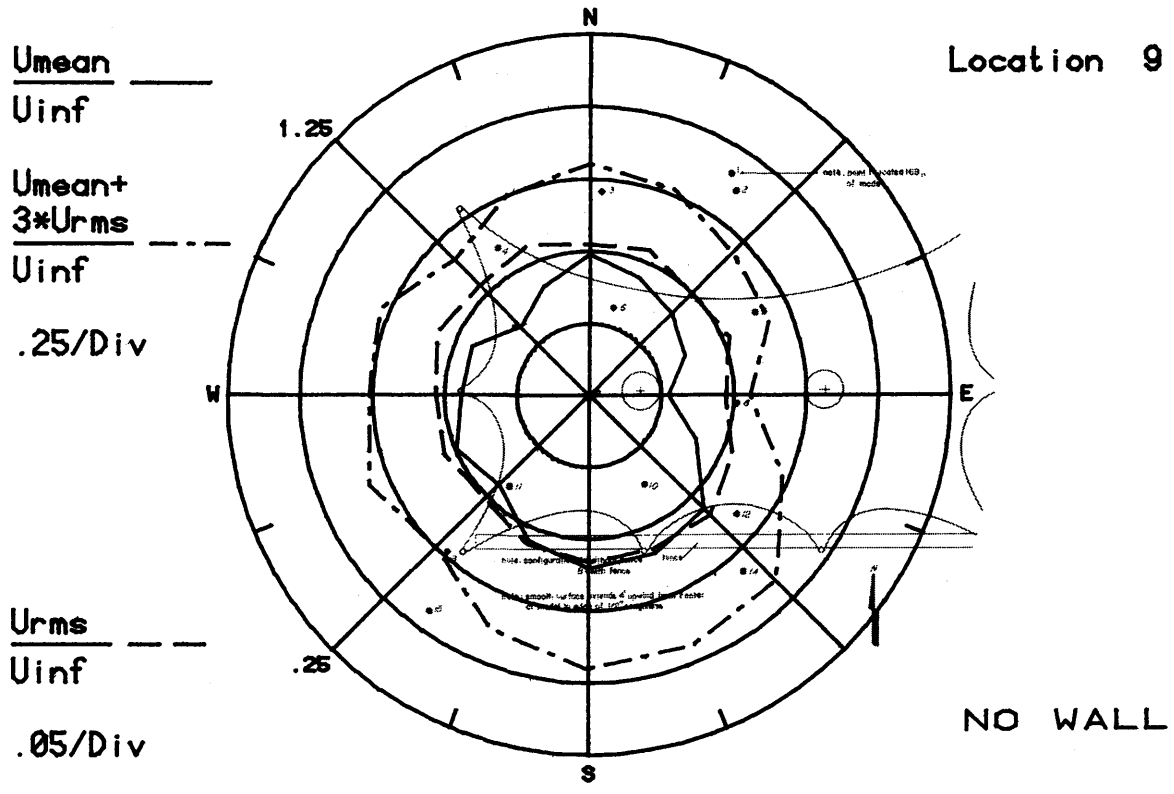


Figure 8d. Mean Velocities and Turbulence Intensities at Pedestrian Locations 7 and 8



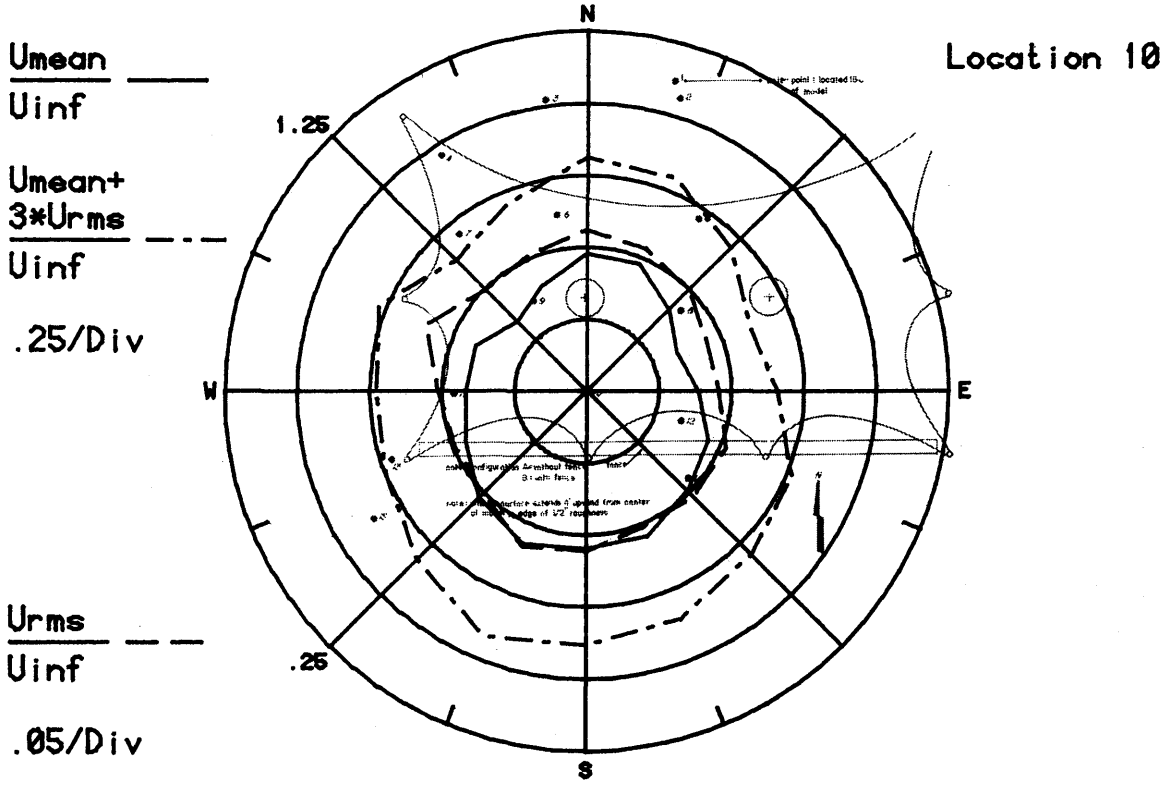
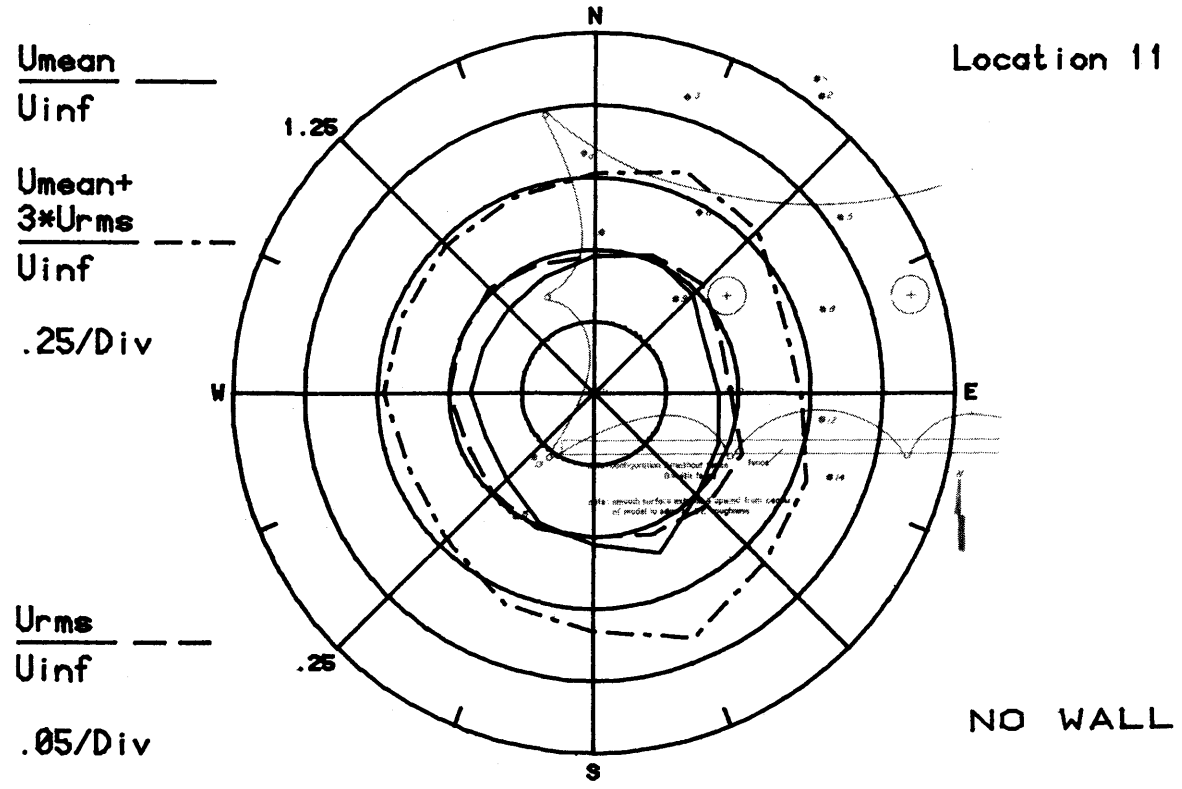


Figure 8e. Mean Velocities and Turbulence Intensities at Pedestrian Locations 9 and 10



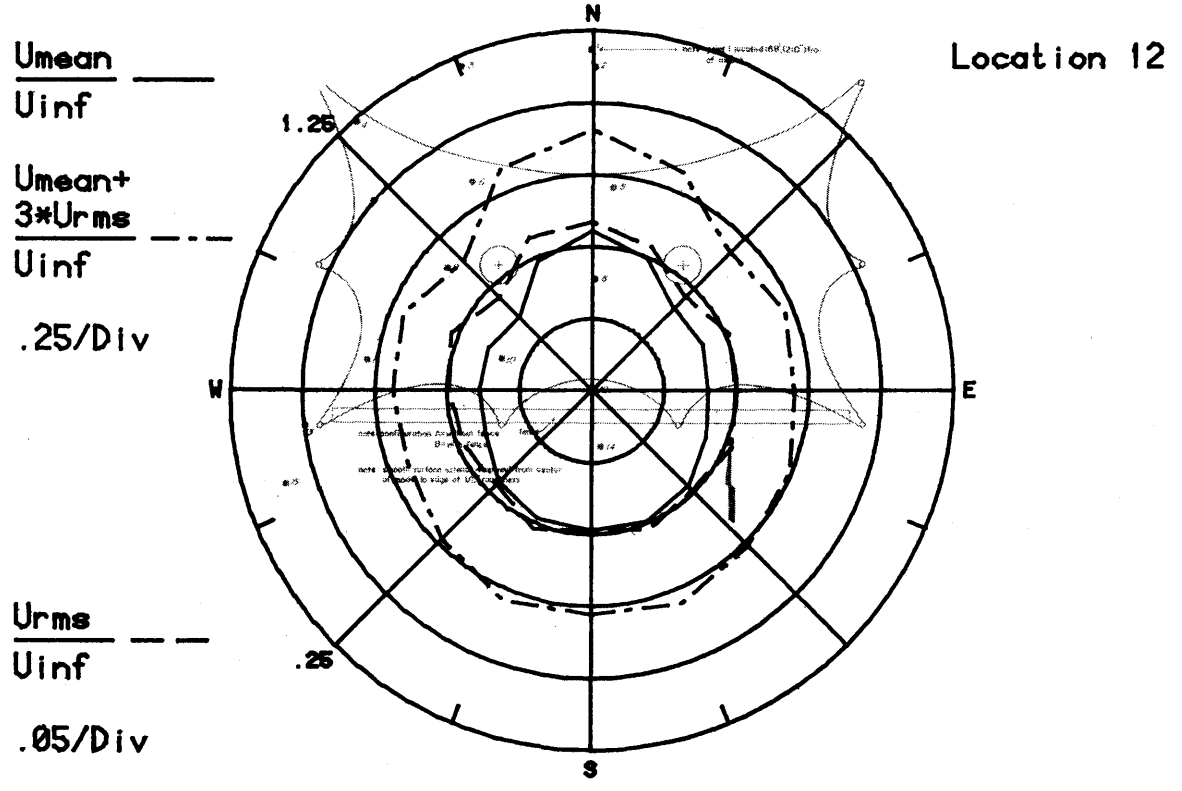


Figure 8f. Mean Velocities and Turbulence Intensities at Pedestrian Locations 11 and 12

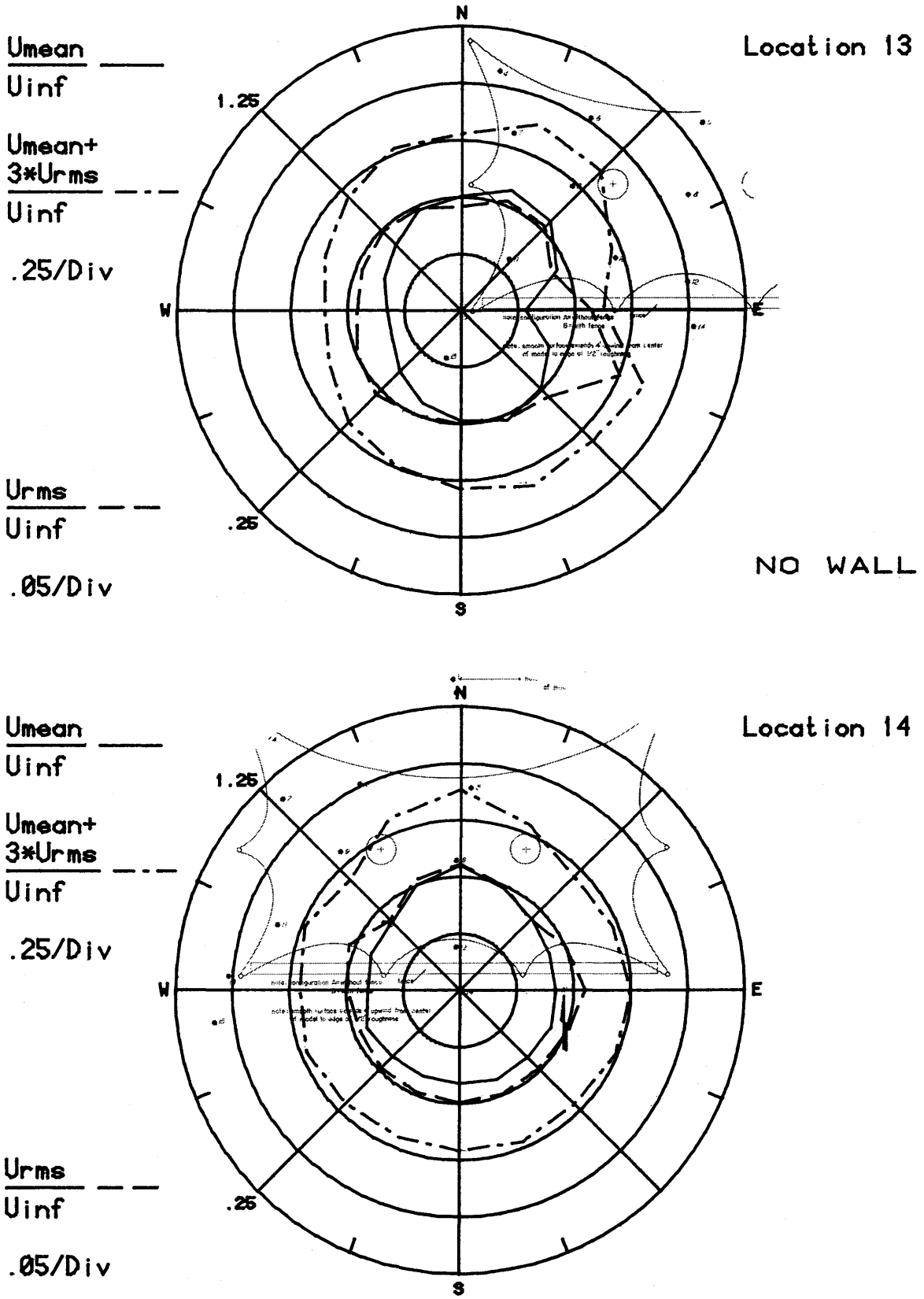


Figure 8g. Mean Velocities and Turbulence Intensities at Pedestrian Locations 13 and 14

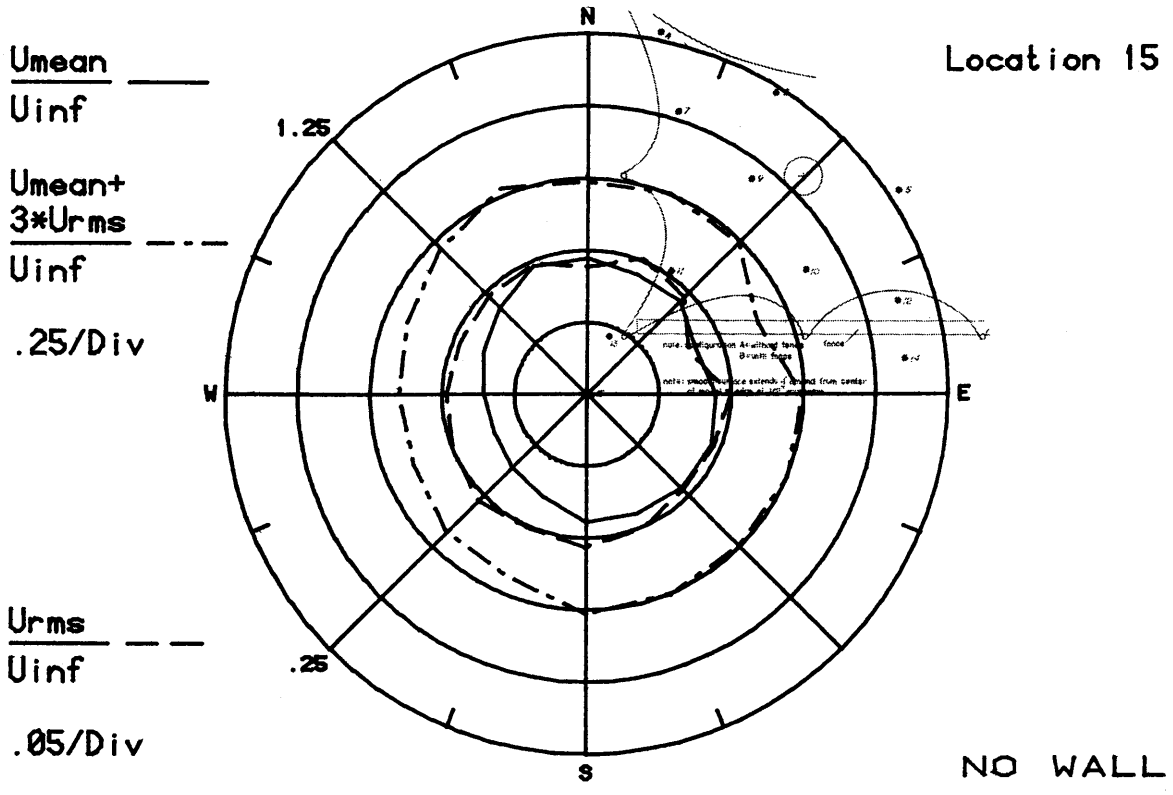


Figure 8h. Mean Velocities and Turbulence Intensities at Pedestrian Location 15

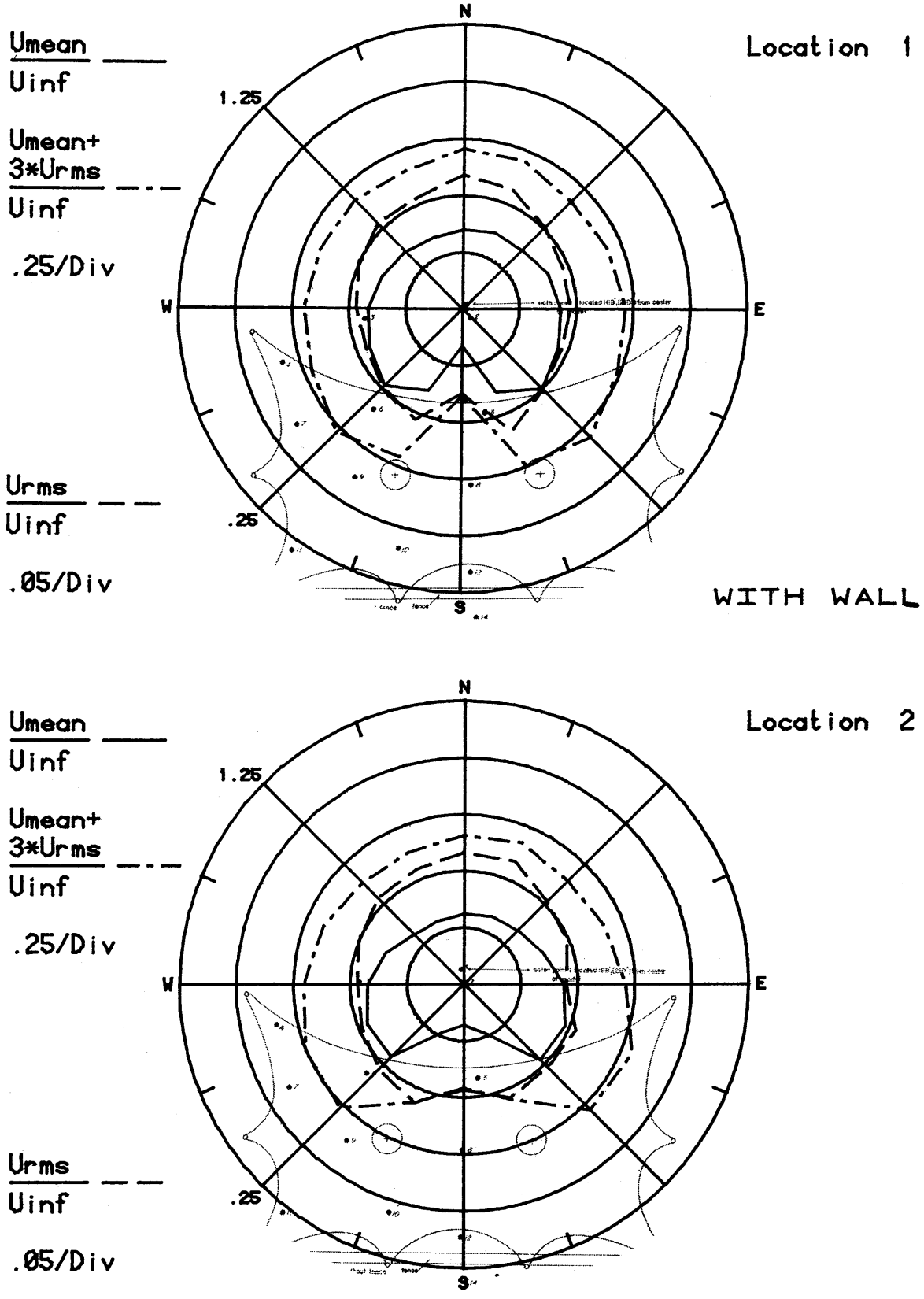


Figure 8i. Mean Velocities and Turbulence Intensities at Pedestrian Locations 1 and 2

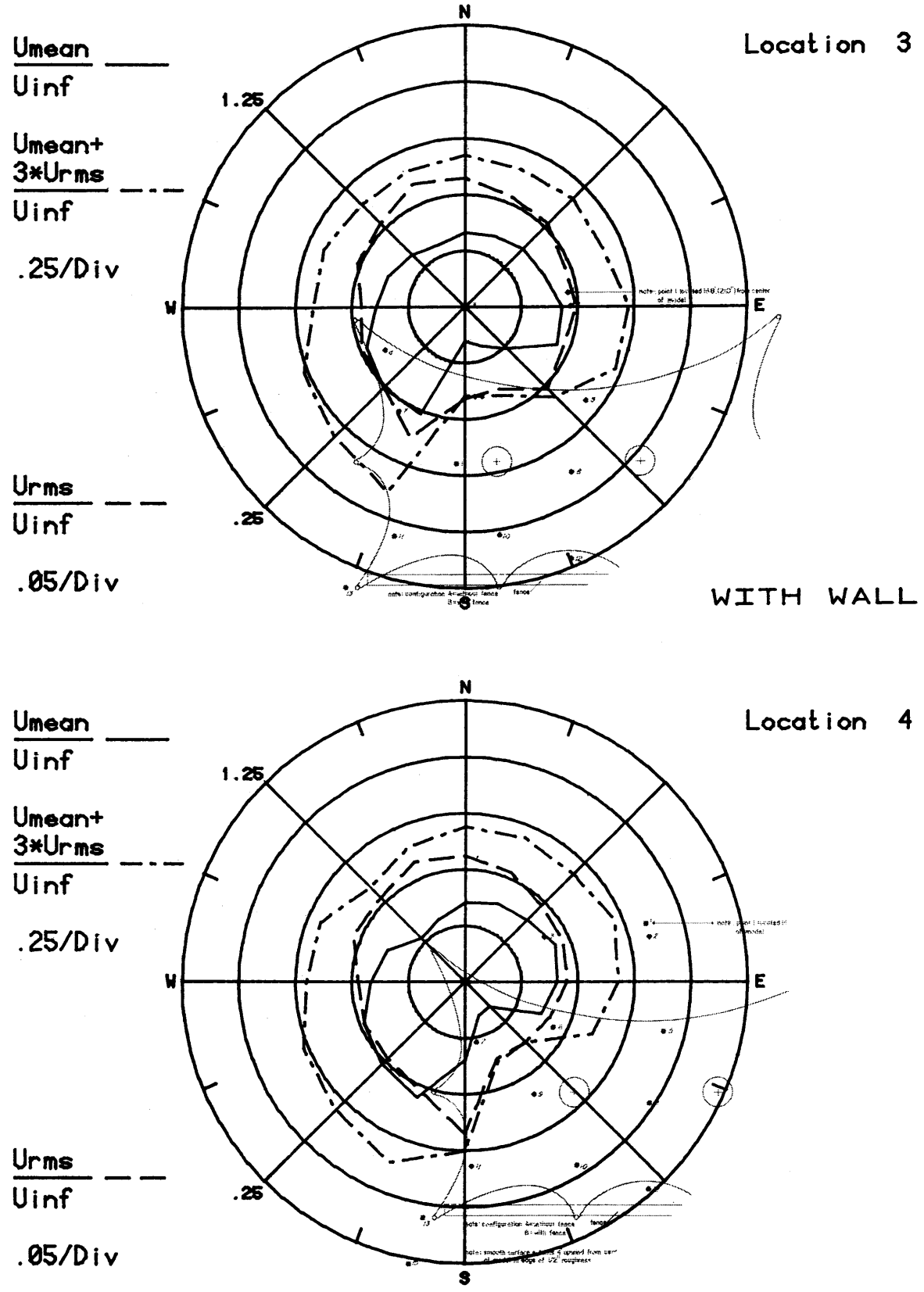
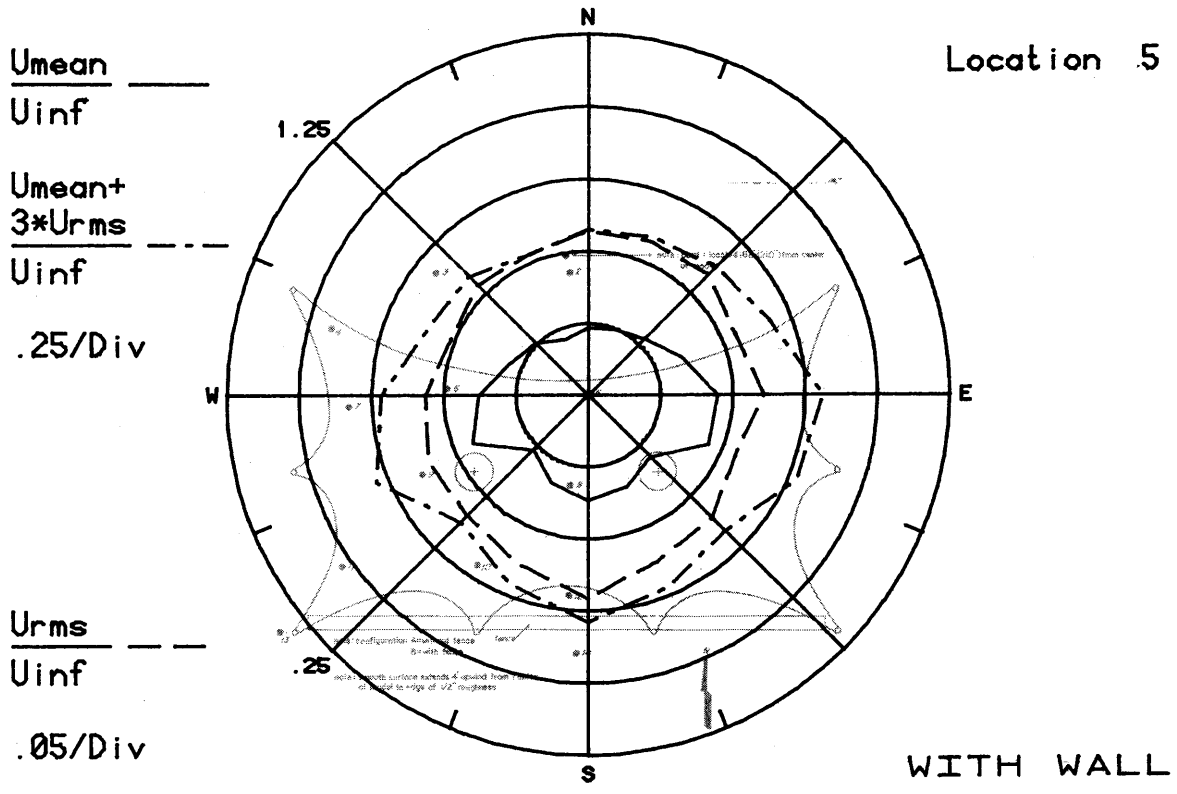


Figure 8j. Mean Velocities and Turbulence Intensities at Pedestrian Locations 3 and 4



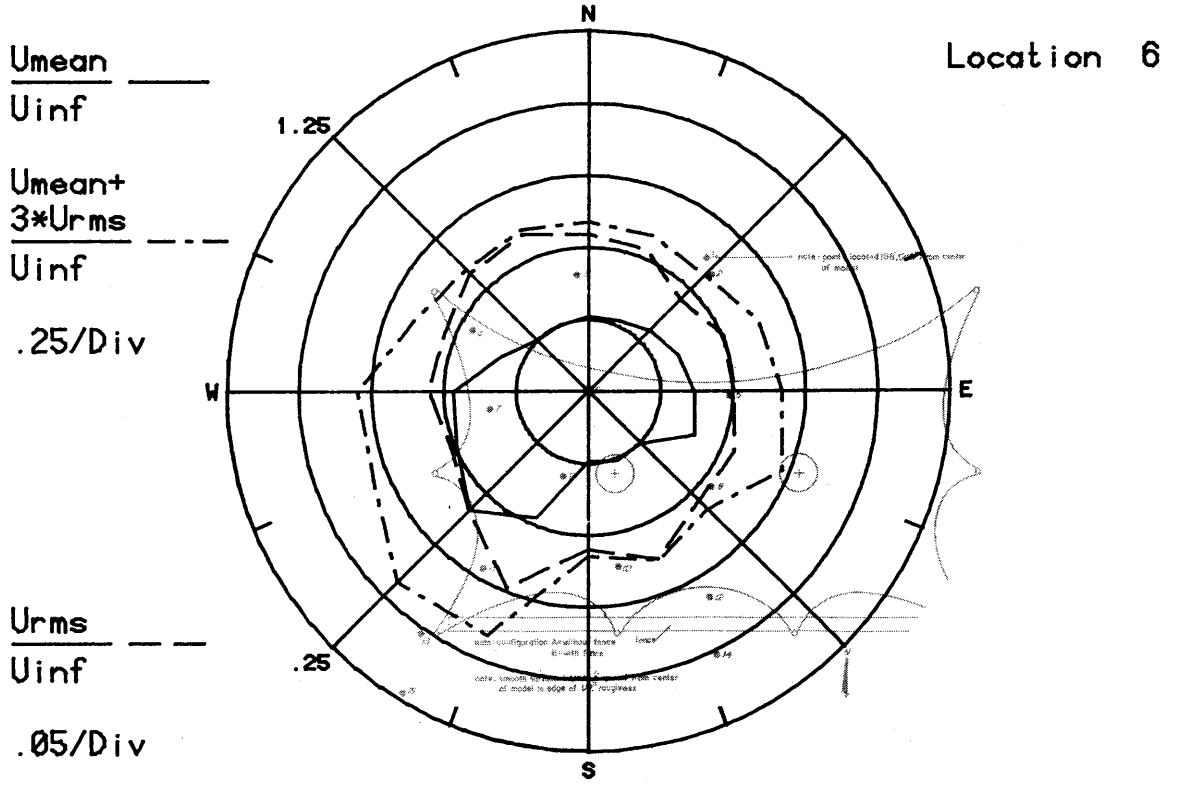
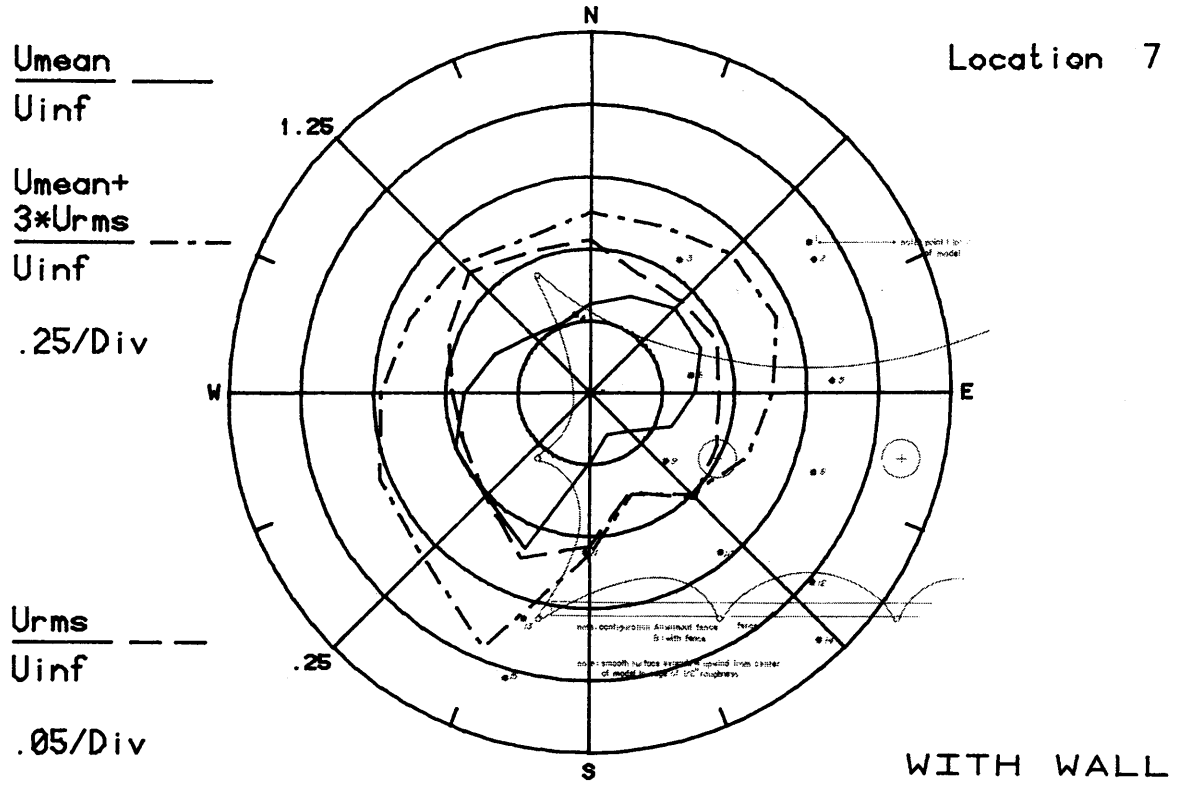


Figure 8k. Mean Velocities and Turbulence Intensities at Pedestrian Locations 5 and 6



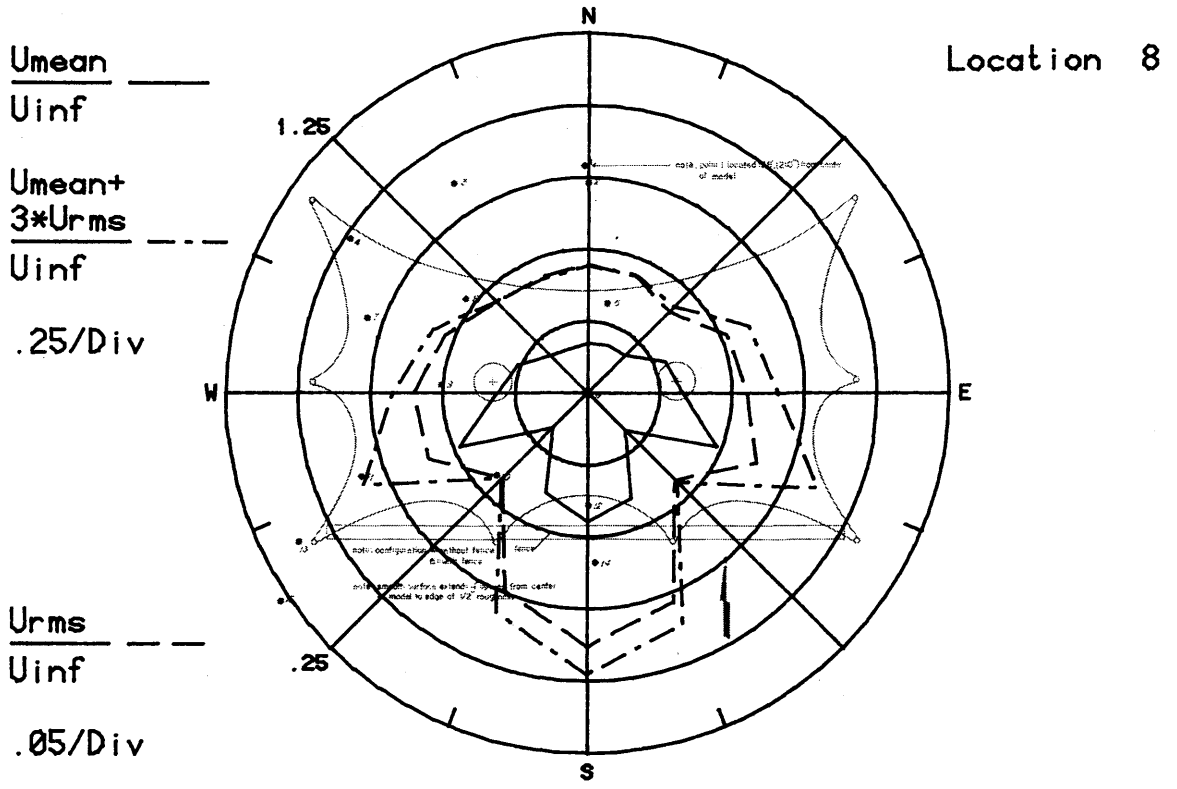
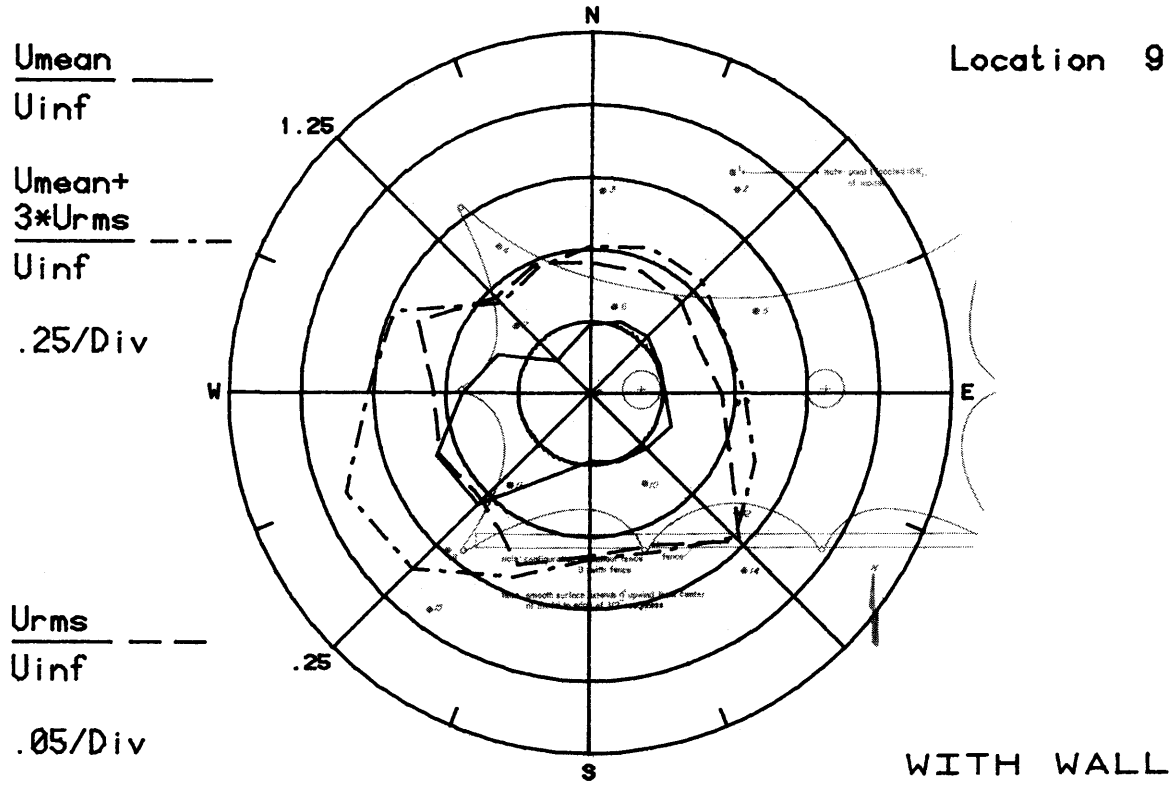


Figure 81. Mean Velocities and Turbulence Intensities at Pedestrian Locations 7 and 8



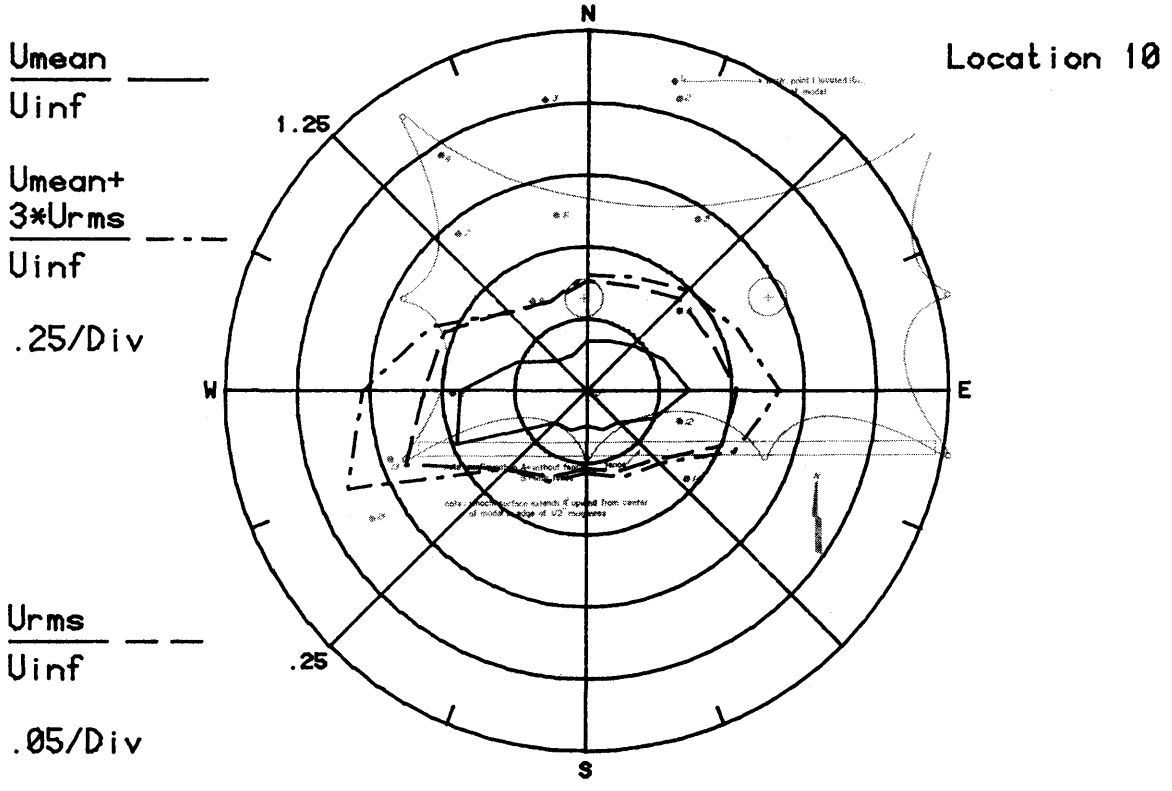


Figure 8m. Mean Velocities and Turbulence Intensities at Pedestrian Locations 9 and 10

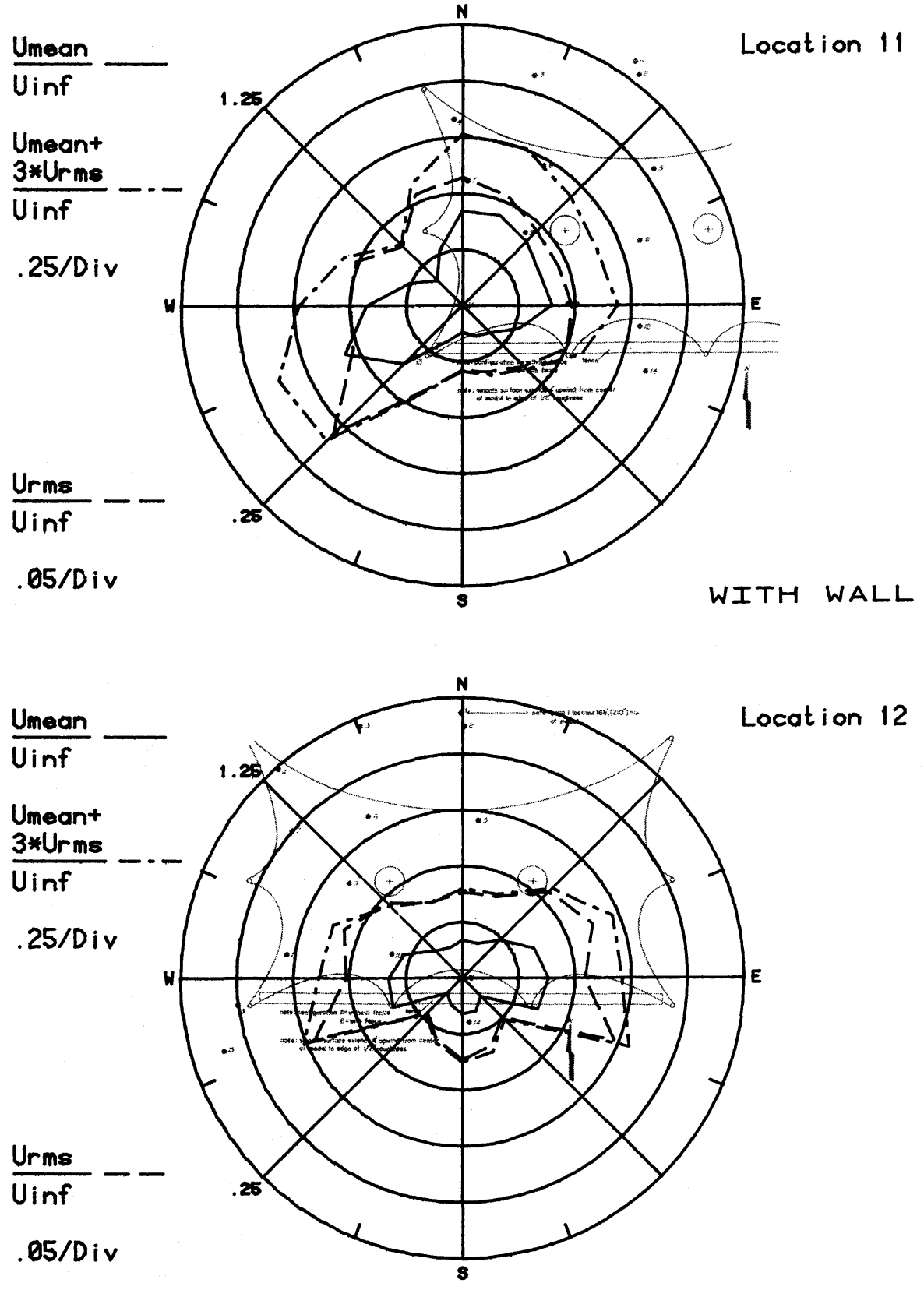
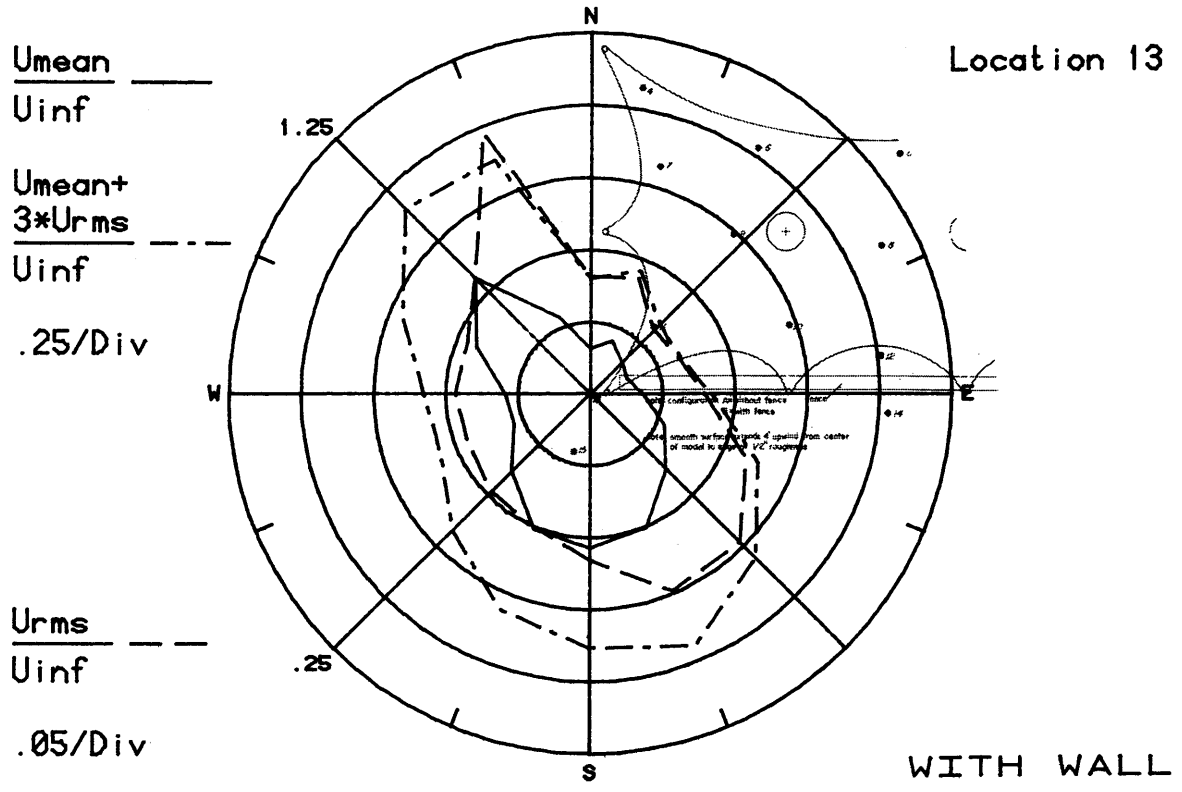


Figure 8n. Mean Velocities and Turbulence Intensities at Pedestrian Locations 11 and 12



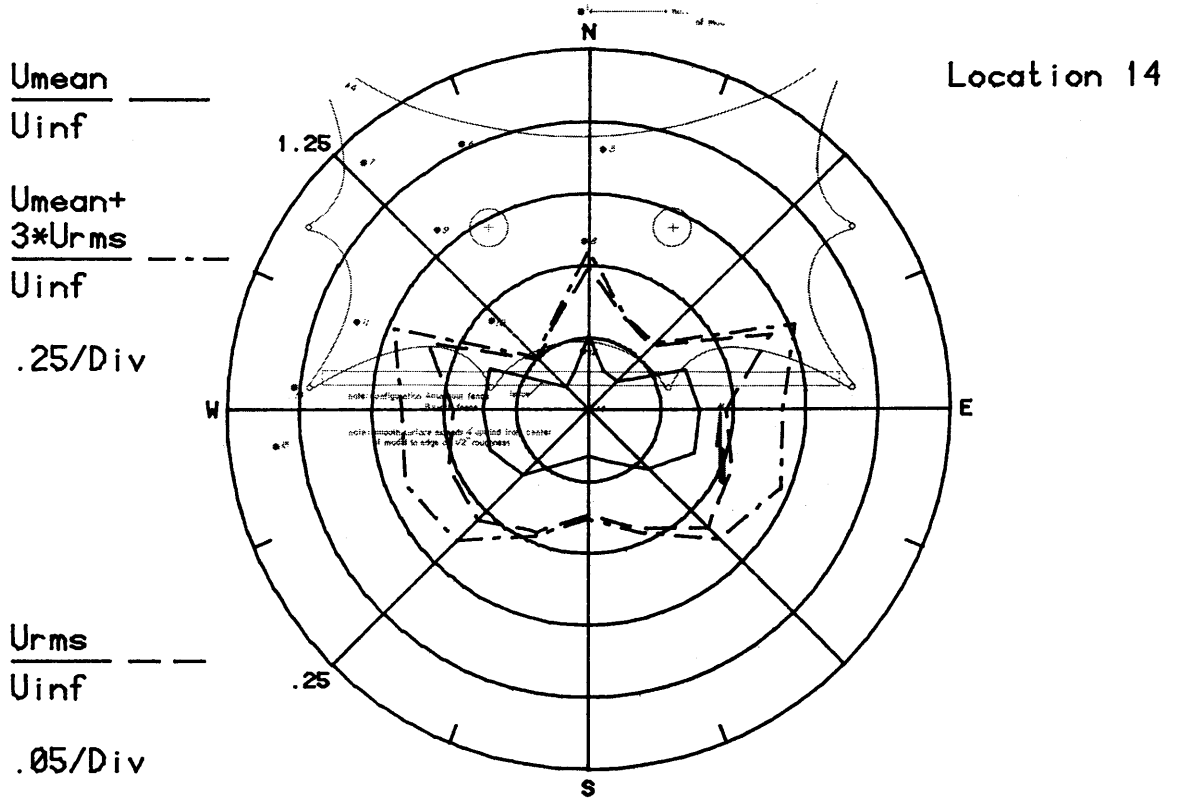


Figure 8o. Mean Velocities and Turbulence Intensities at Pedestrian Locations 13 and 14

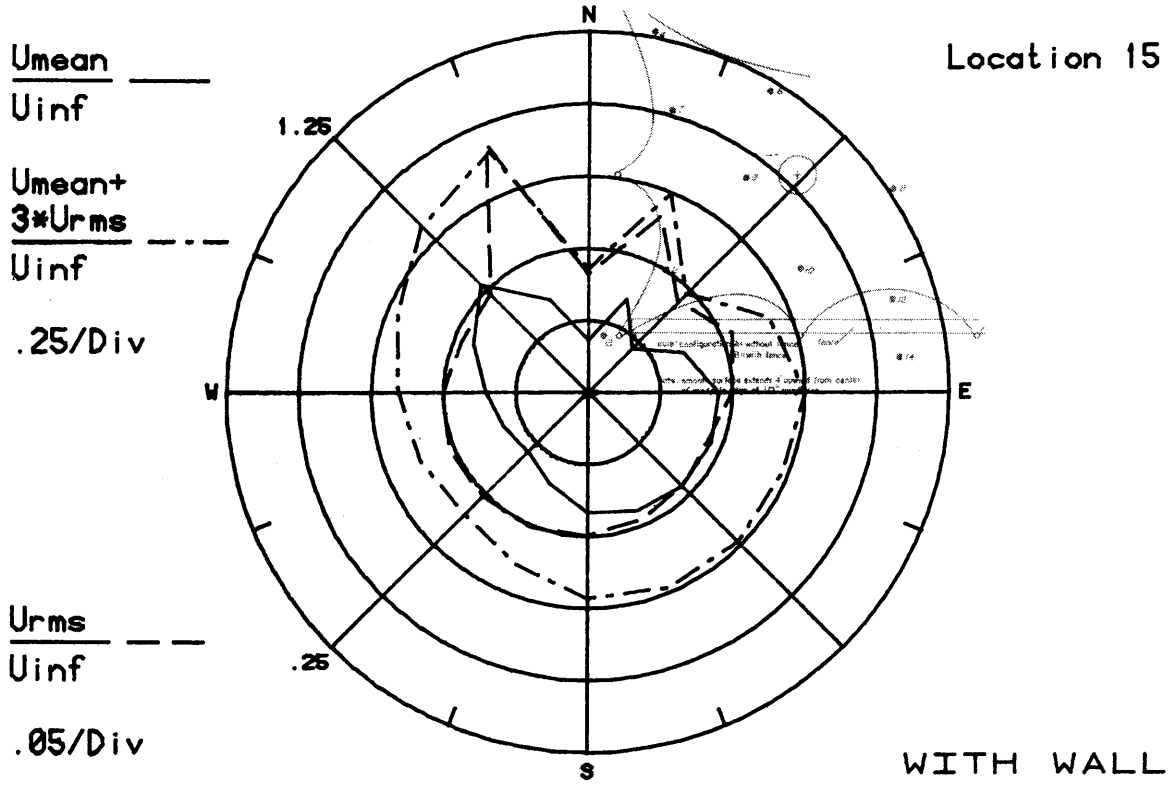


Figure 8p. Mean Velocities and Turbulence Intensities at Pedestrian Location 15

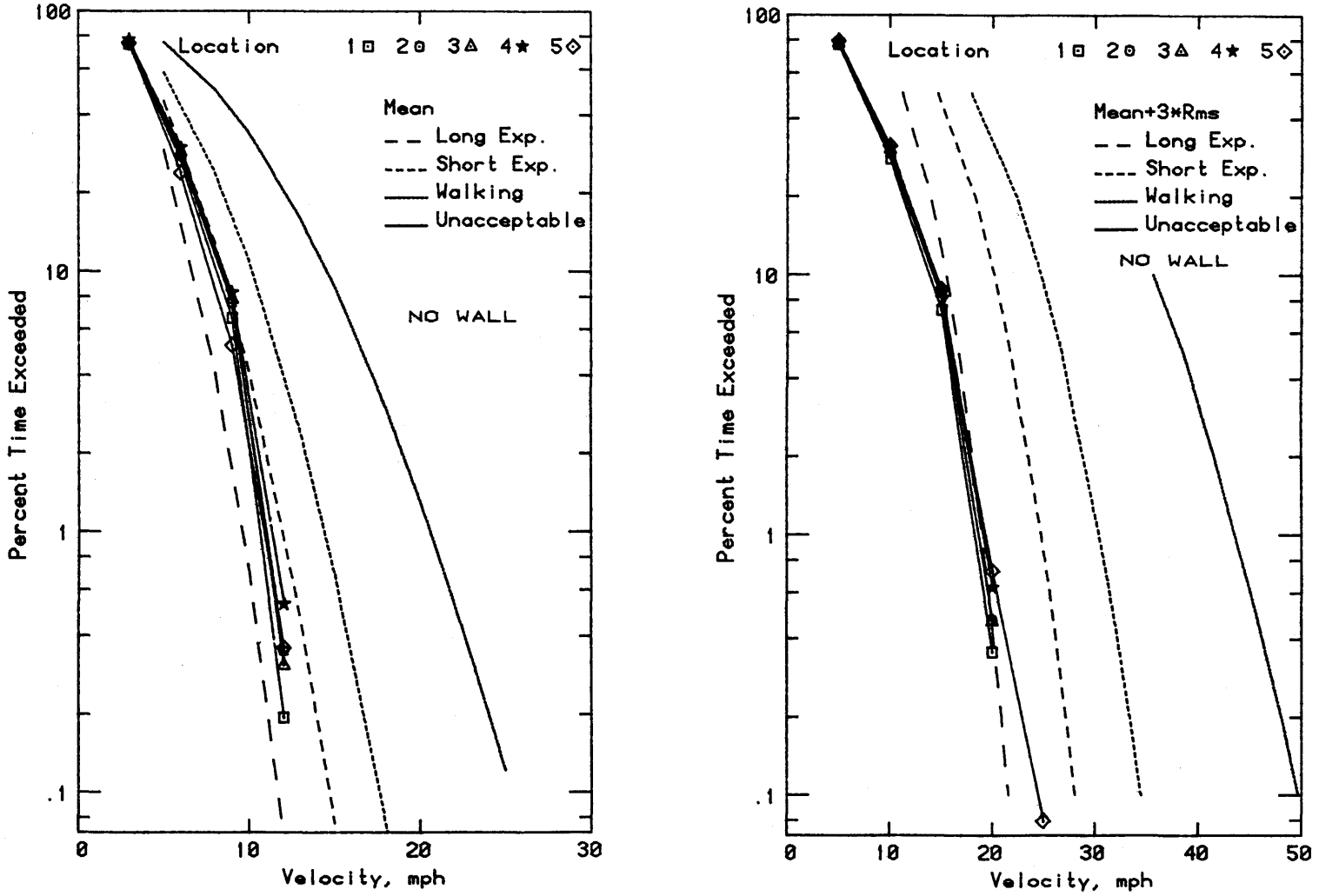


Figure 9a. Wind Velocity Probabilities for Pedestrian Locations

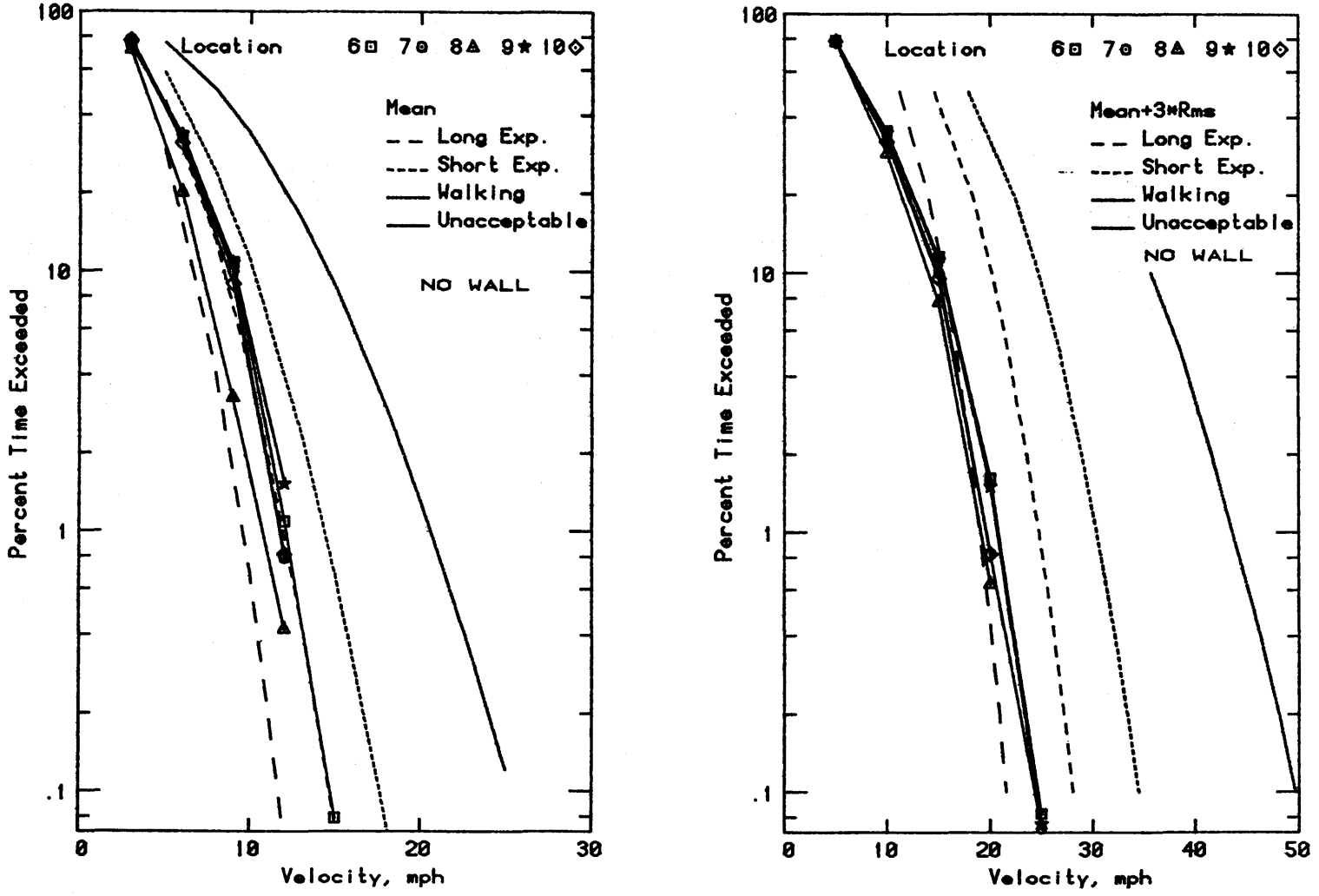


Figure 9b. Wind Velocity Probabilities for Pedestrian Locations

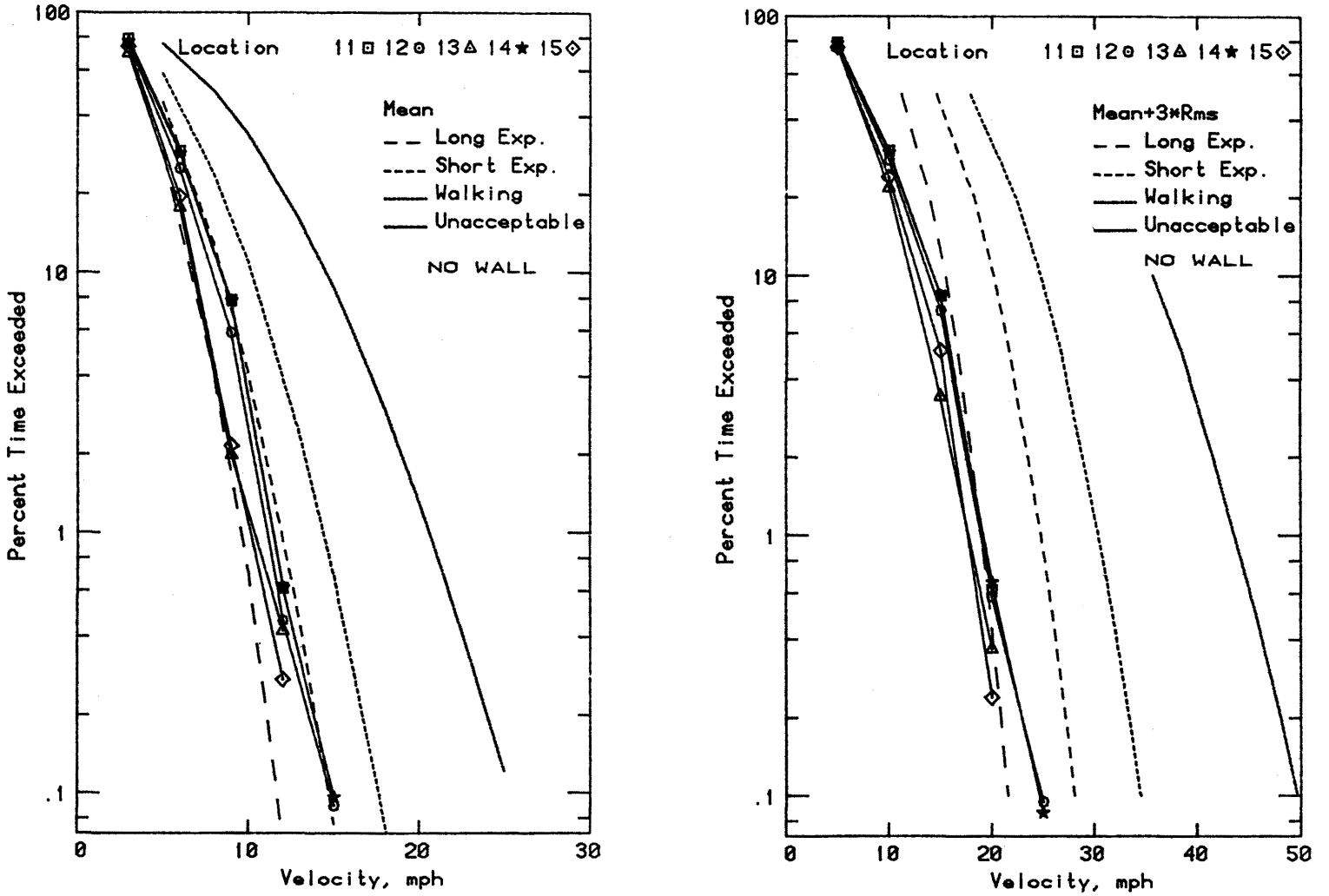


Figure 9c. Wind Velocity Probabilities for Pedestrian Locations

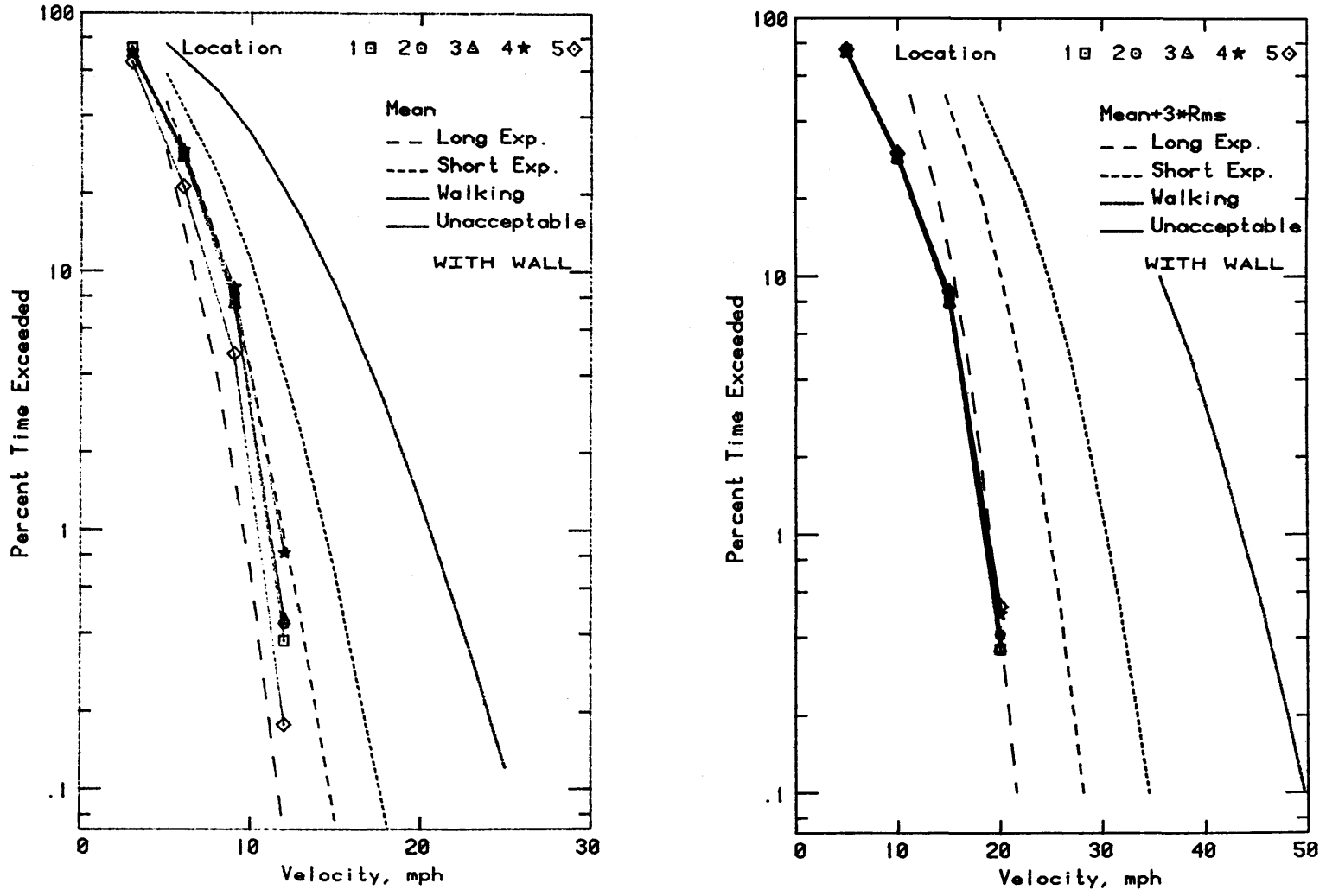


Figure 9d. Wind Velocity Probabilities for Pedestrian Locations

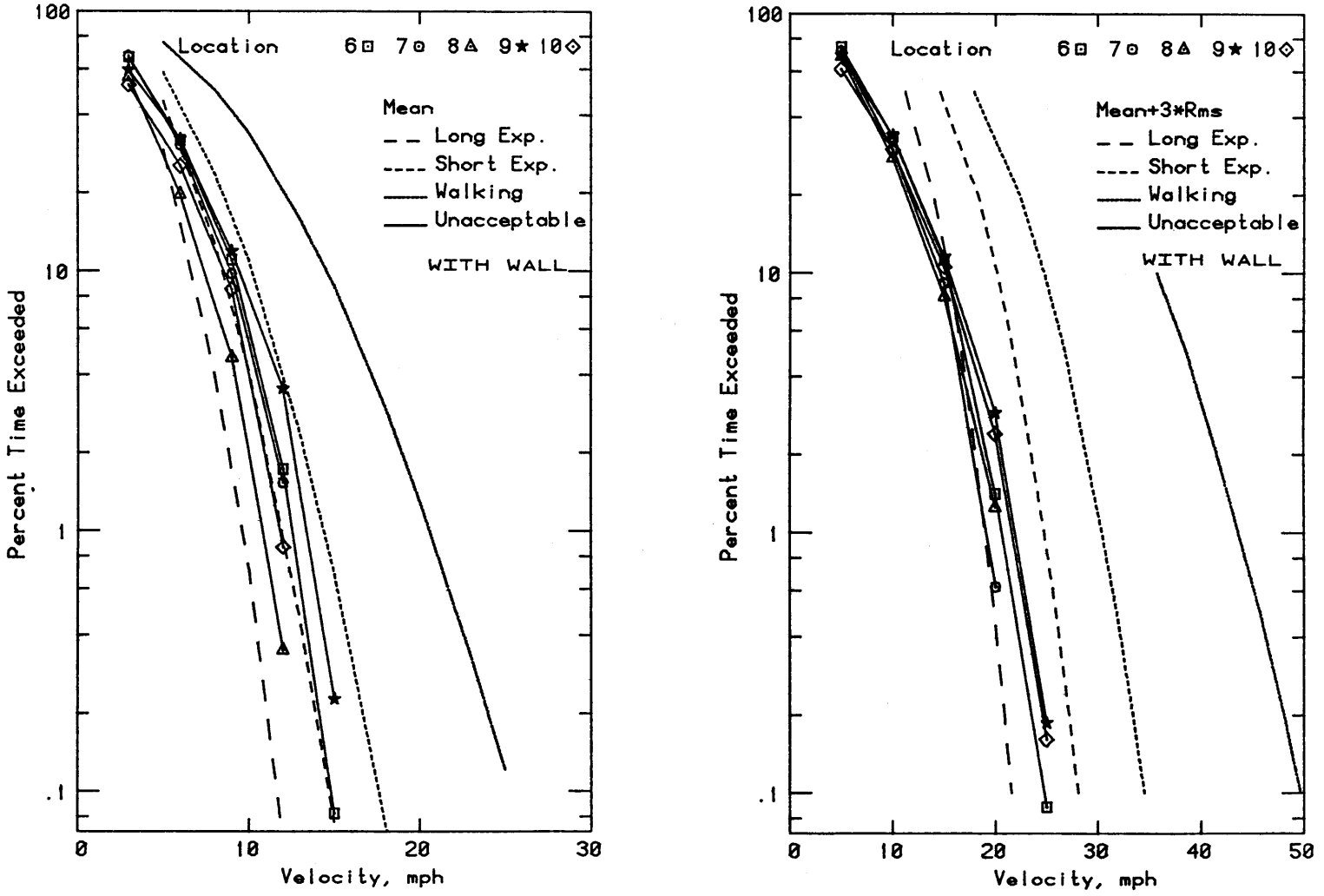


Figure 9e. Wind Velocity Probabilities for Pedestrian Locations

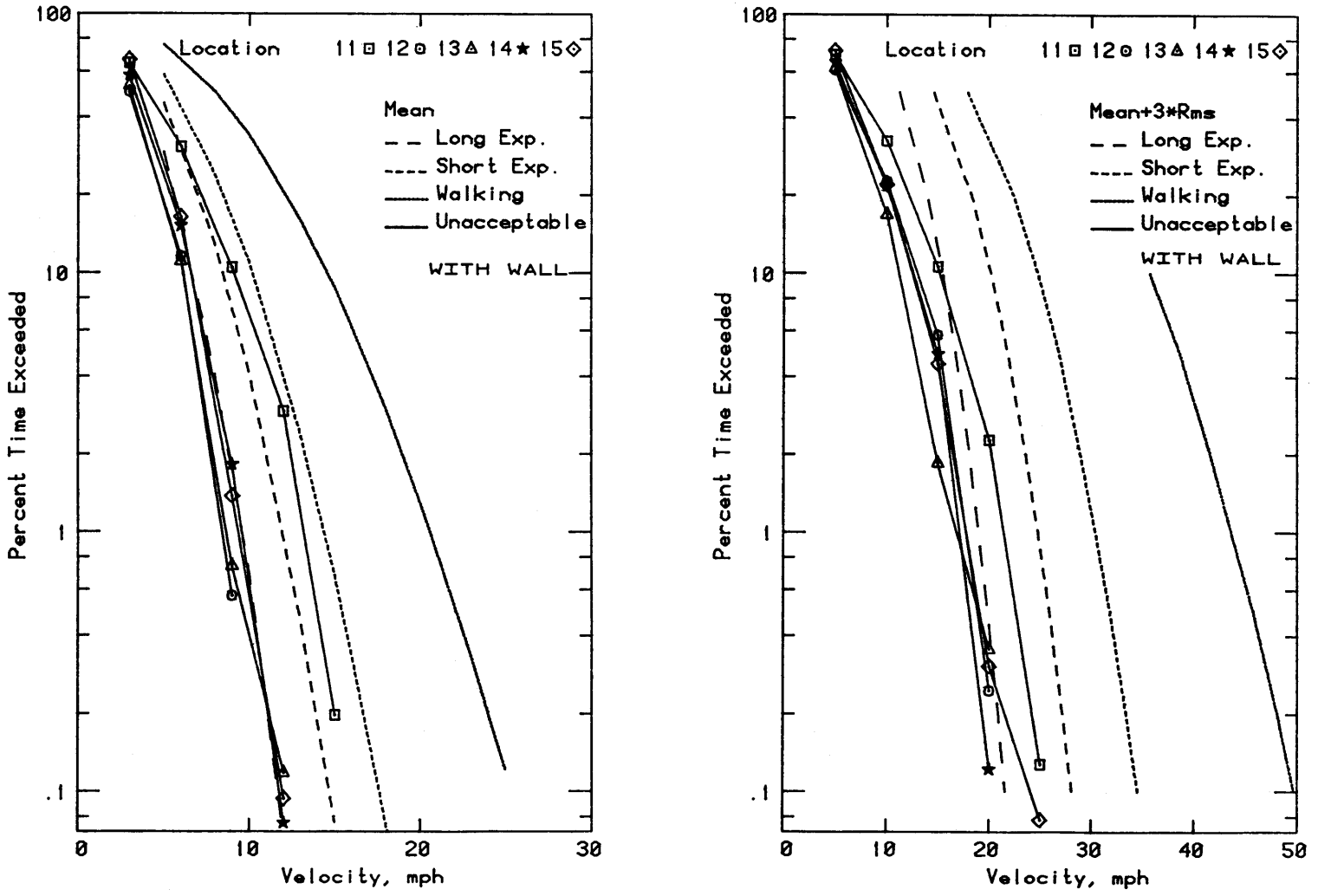


Figure 9f. Wind Velocity Probabilities for Pedestrian Locations

Tension Membrane Structure

Pressure Contours

Configuration	Wind Direction	Pressure Coefficients	View
A -- No Wall	330	Minimum	Top
A -- No Wall	330	Minimum	Bottom
A -- No Wall	330	Maximum	Top
A -- No Wall	330	Maximum	Bottom
A -- No Wall	330	Mean	Top
A -- No Wall	330	Mean	Bottom
A -- No Wall	All	Minimum	Top
A -- No Wall	All	Minimum	Bottom
A -- No Wall	All	Maximum	Top
A -- No Wall	All	Maximum	Bottom
B -- With Wall	320	Minimum	Top
B -- With Wall	320	Minimum	Bottom
B -- With Wall	320	Maximum	Top
B -- With Wall	320	Maximum	Bottom
B -- With Wall	320	Mean	Top
B -- With Wall	320	Mean	Bottom
B -- With Wall	All	Minimum	Top
B -- With Wall	All	Minimum	Bottom
B -- With Wall	All	Maximum	Top
B -- With Wall	All	Maximum	Bottom

Figure 10a. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : 330
PRESSURE COEFFICIENTS : MINIMUM
VIEW : TOP

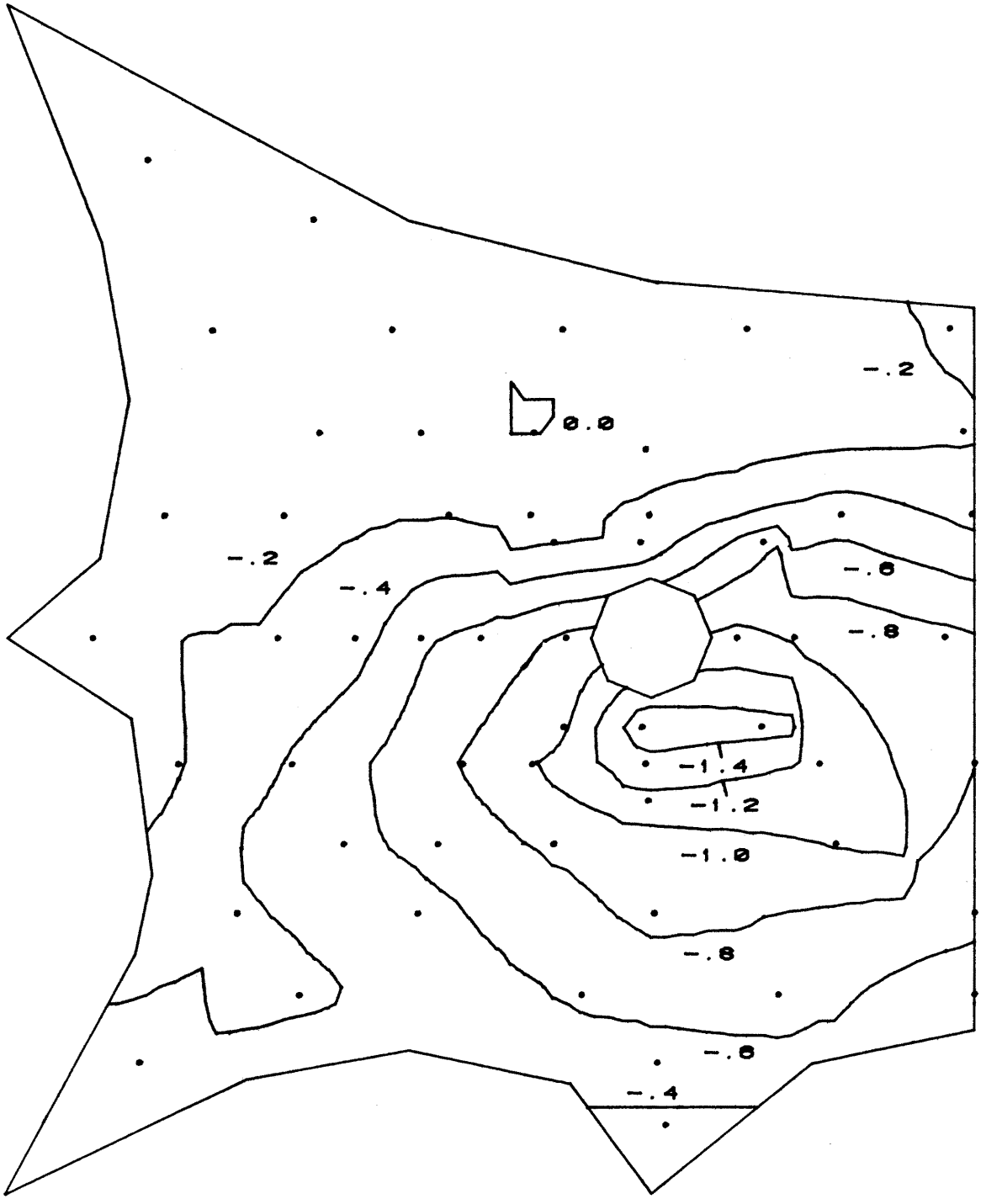


Figure 10b. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : 330
PRESSURE COEFFICIENTS : MINIMUM
VIEW : BOTTOM

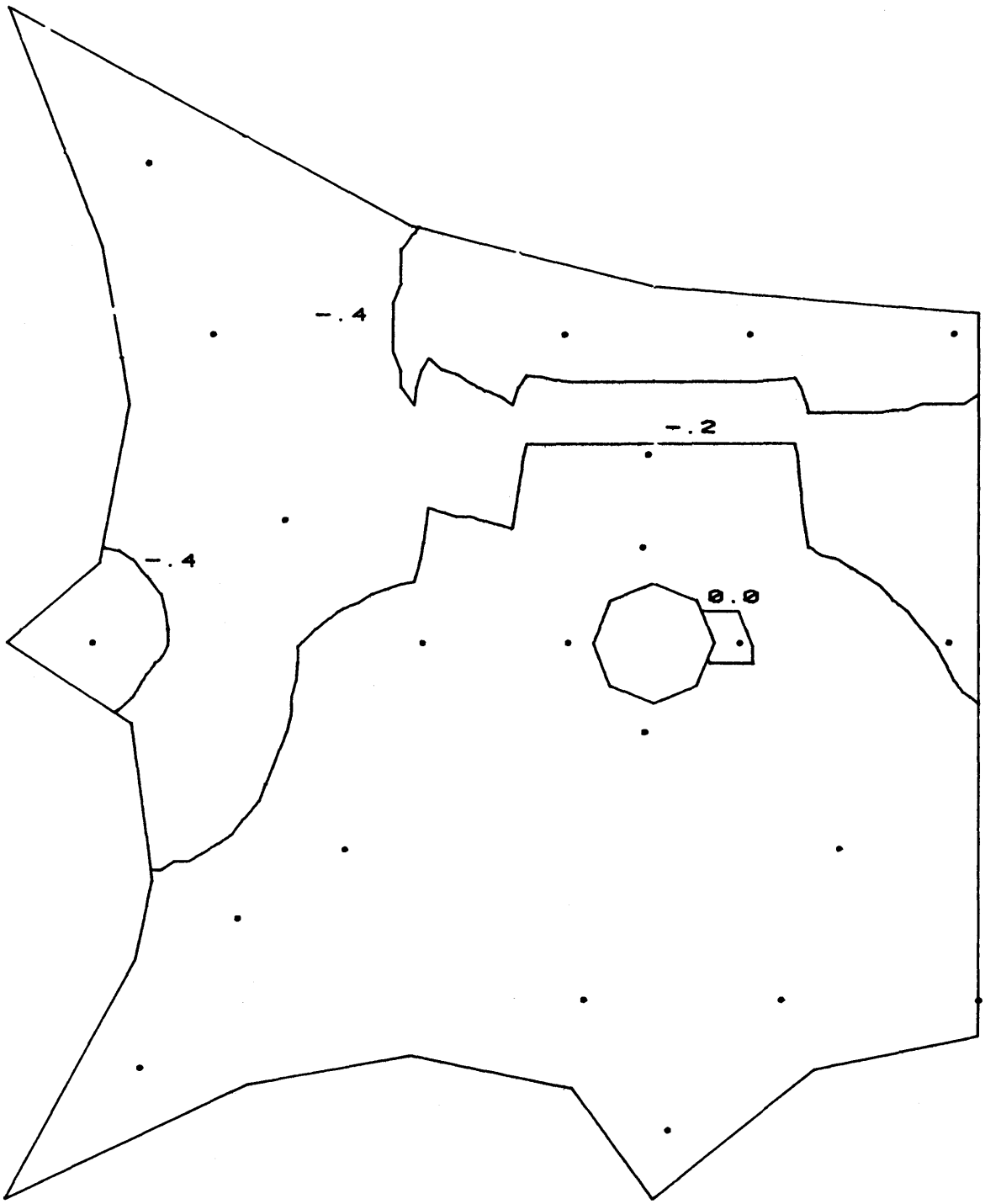


Figure 10c. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : 330
PRESSURE COEFFICIENTS : MAXIMUM
VIEW : TOP

Figure 10d. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : 330
PRESSURE COEFFICIENTS : MAXIMUM
VIEW : BOTTOM

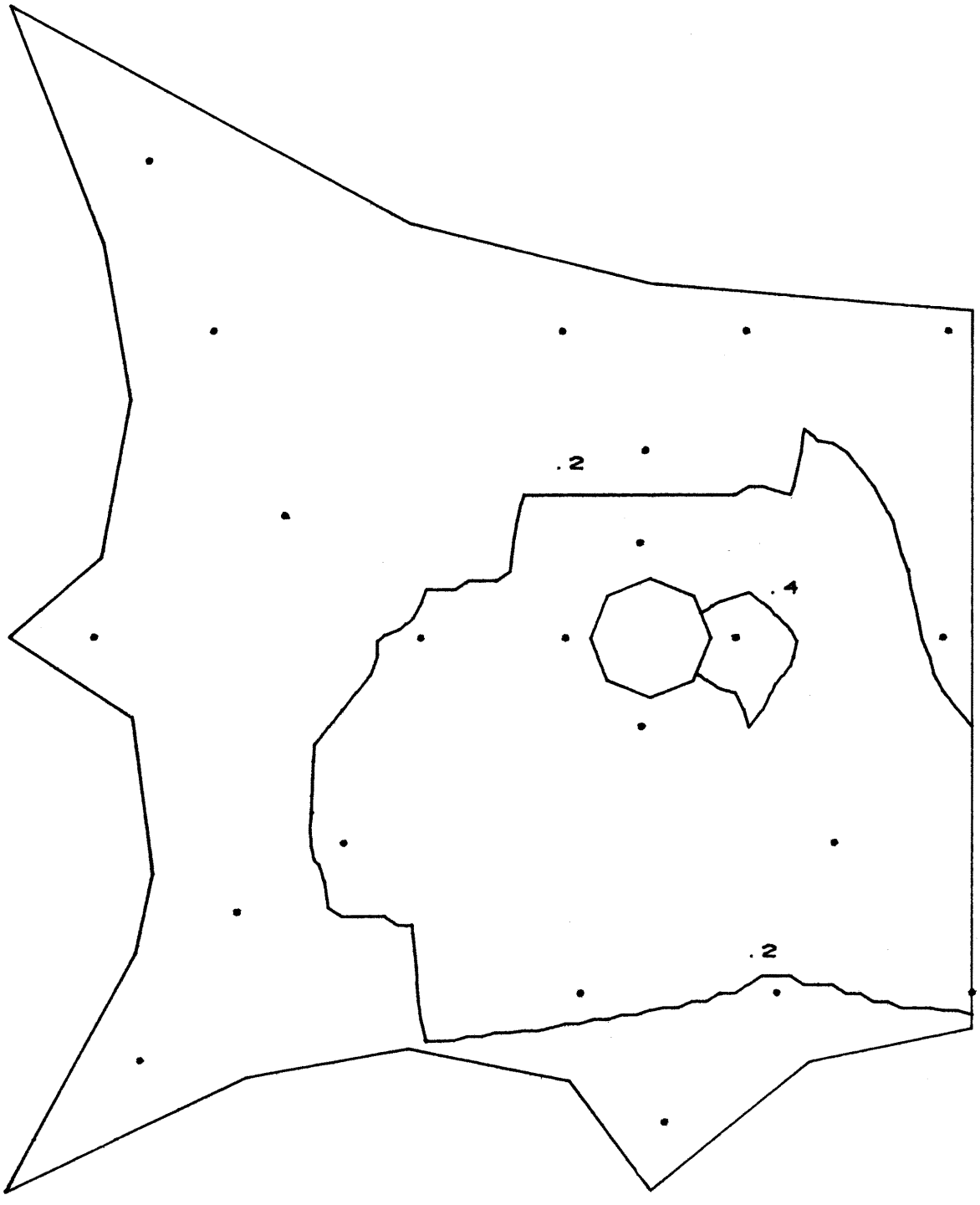


Figure 10e. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : 330
PRESSURE COEFFICIENTS : MEAN
VIEW : TOP

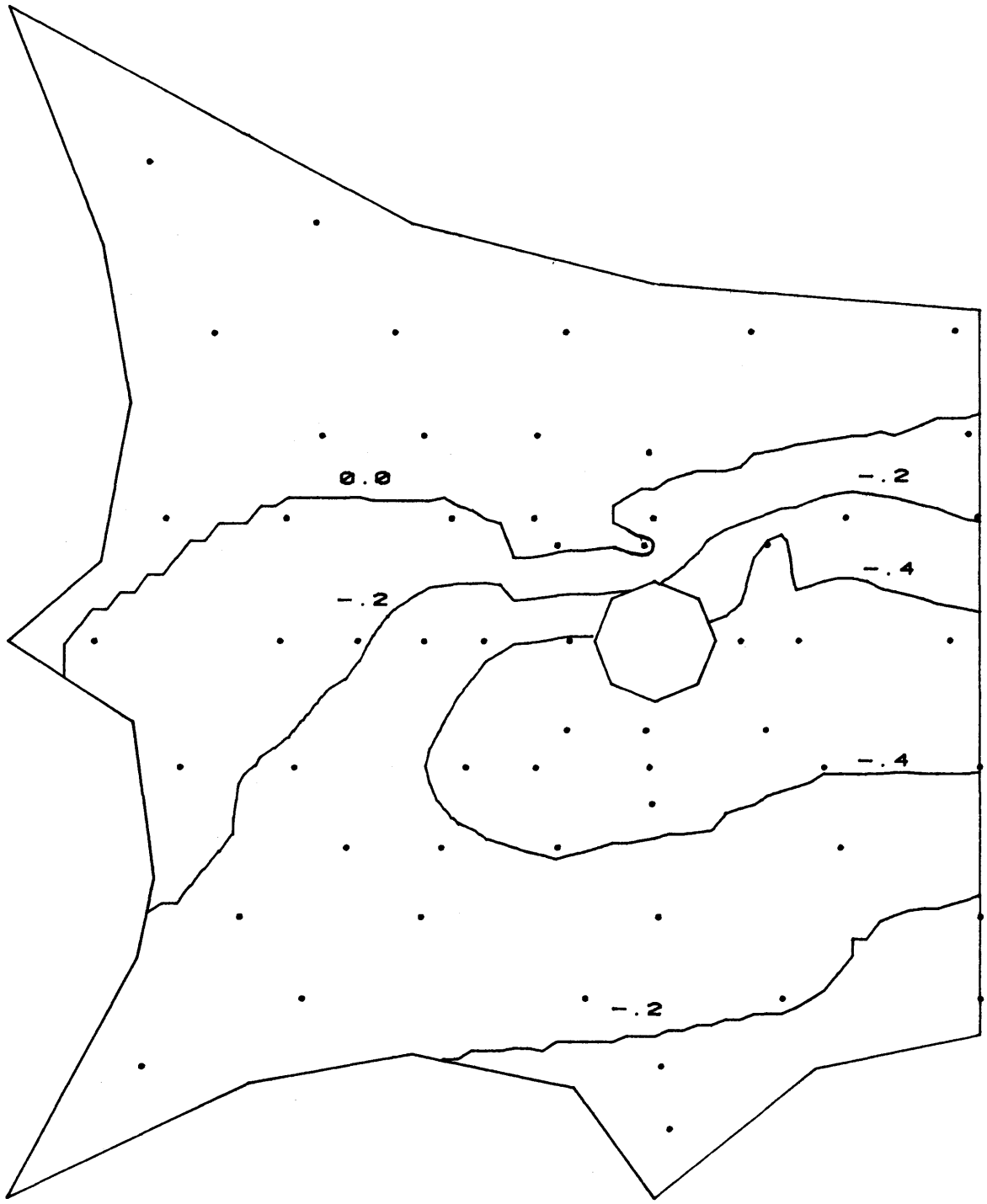


Figure 10f. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : 330
PRESSURE COEFFICIENTS : MEAN
VIEW : BOTTOM

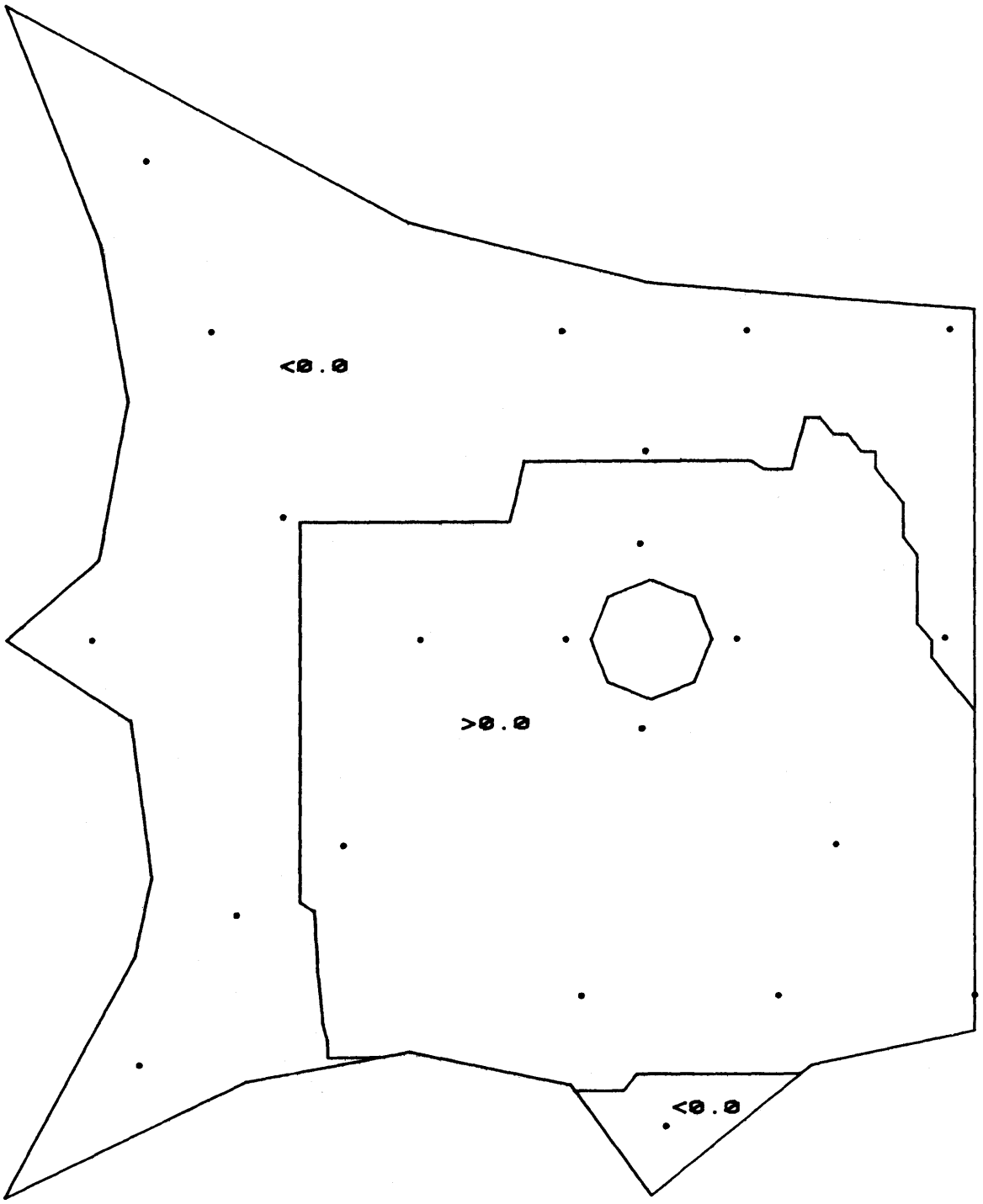


Figure 10g. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : ALL
PRESSURE COEFFICIENTS : MINIMUM
VIEW : TOP

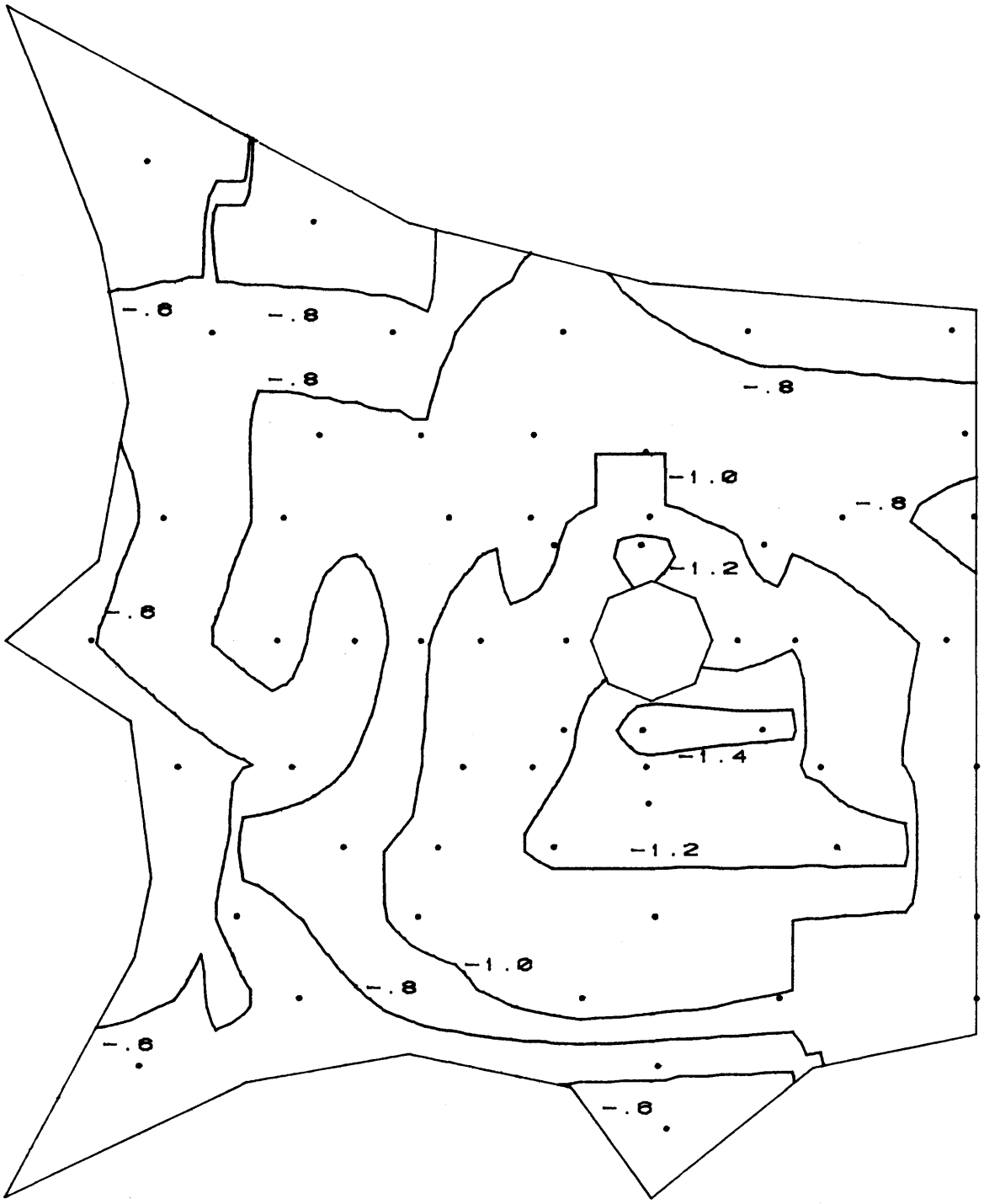


Figure 10h. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : ALL
PRESSURE COEFFICIENTS : MINIMUM
VIEW : BOTTOM

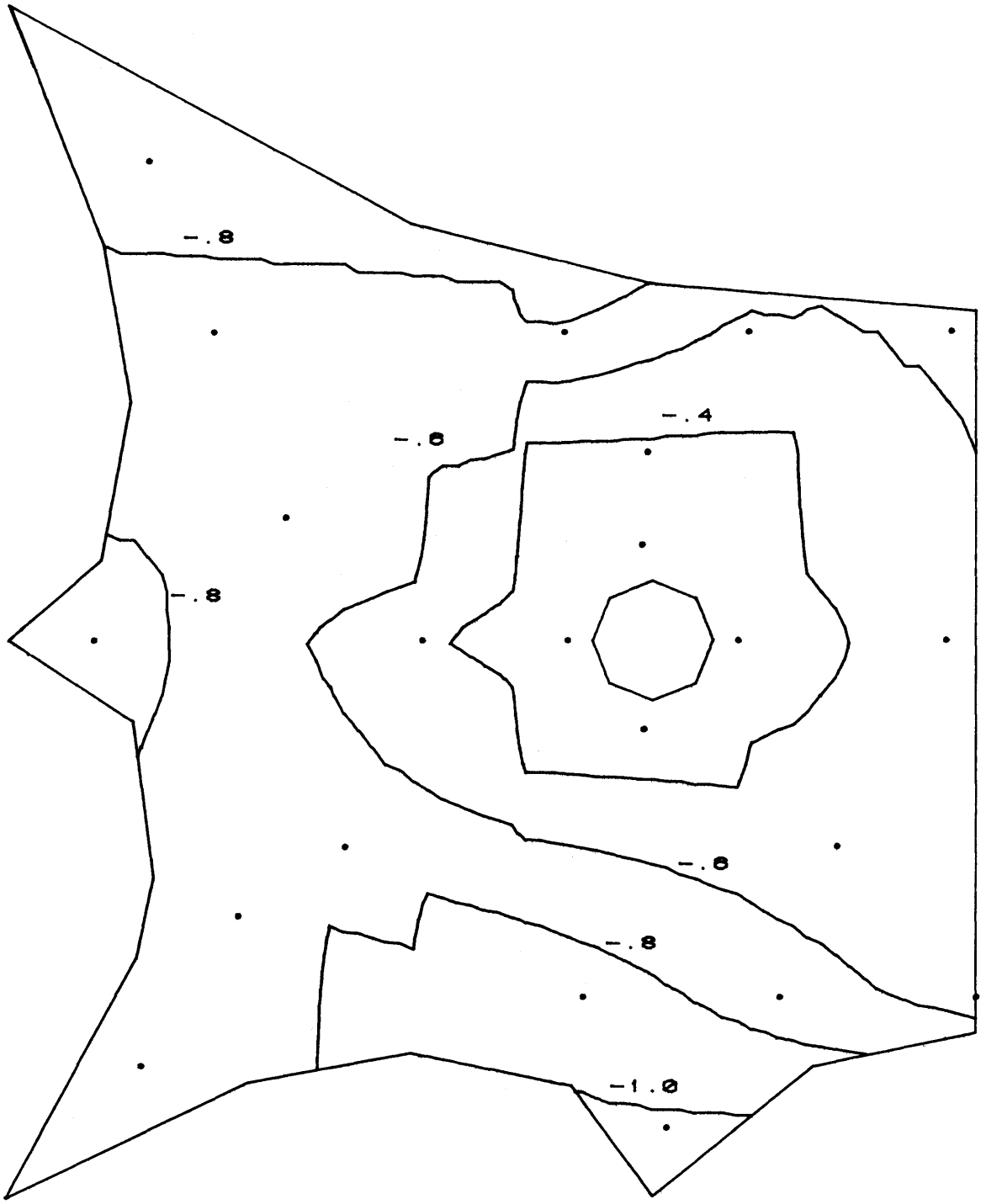


Figure 10i. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : ALL
PRESSURE COEFFICIENTS : MAXIMUM
VIEW : TOP

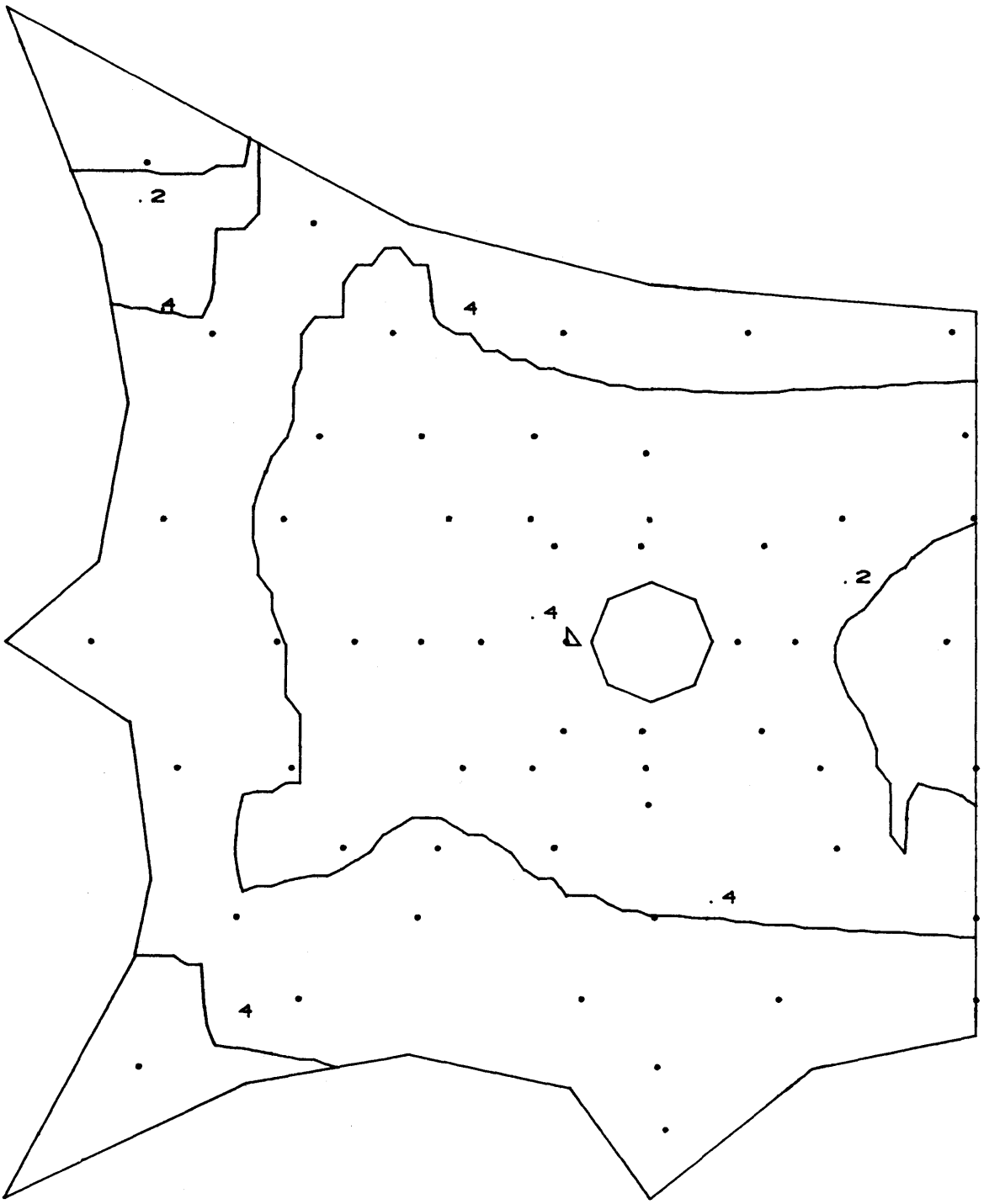


Figure 10j. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : A -- NO WALL
WIND DIRECTION : ALL
PRESSURE COEFFICIENTS : MAXIMUM
VIEW : BOTTOM

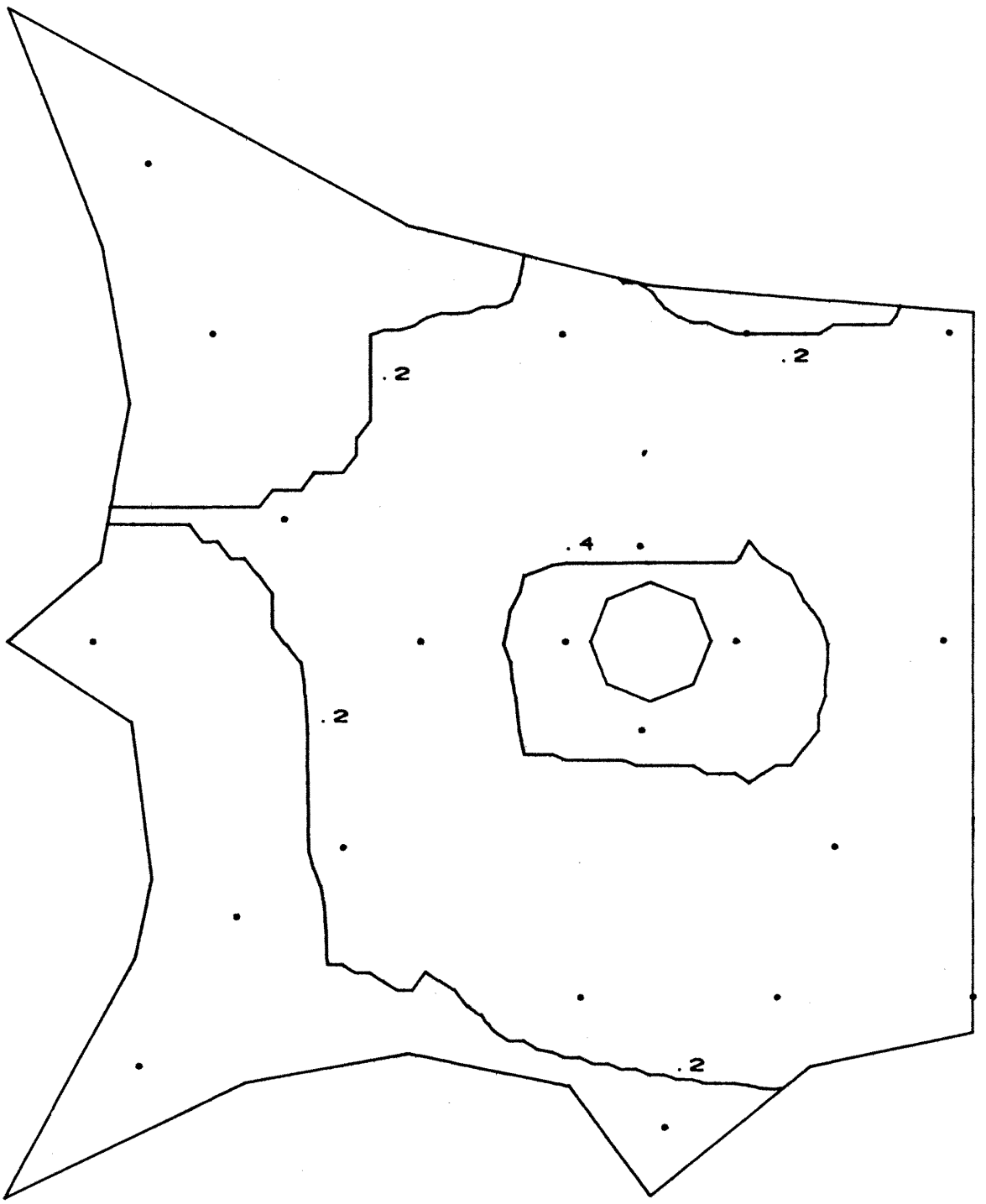


Figure 10k. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : 320
PRESSURE COEFFICIENTS : MINIMUM
VIEW : TOP

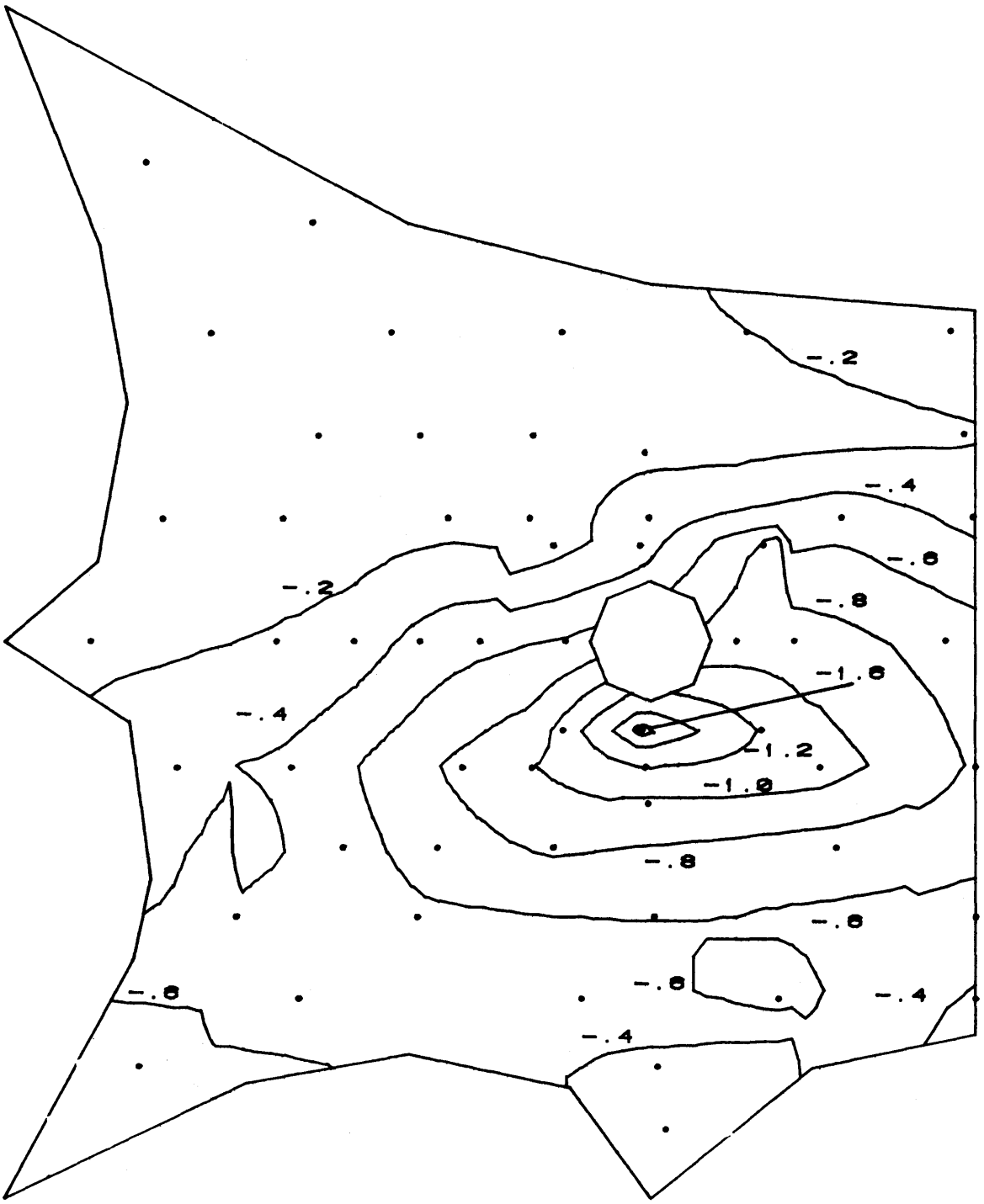


Figure 101. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : 320
PRESSURE COEFFICIENTS : MINIMUM
VIEW : BOTTOM

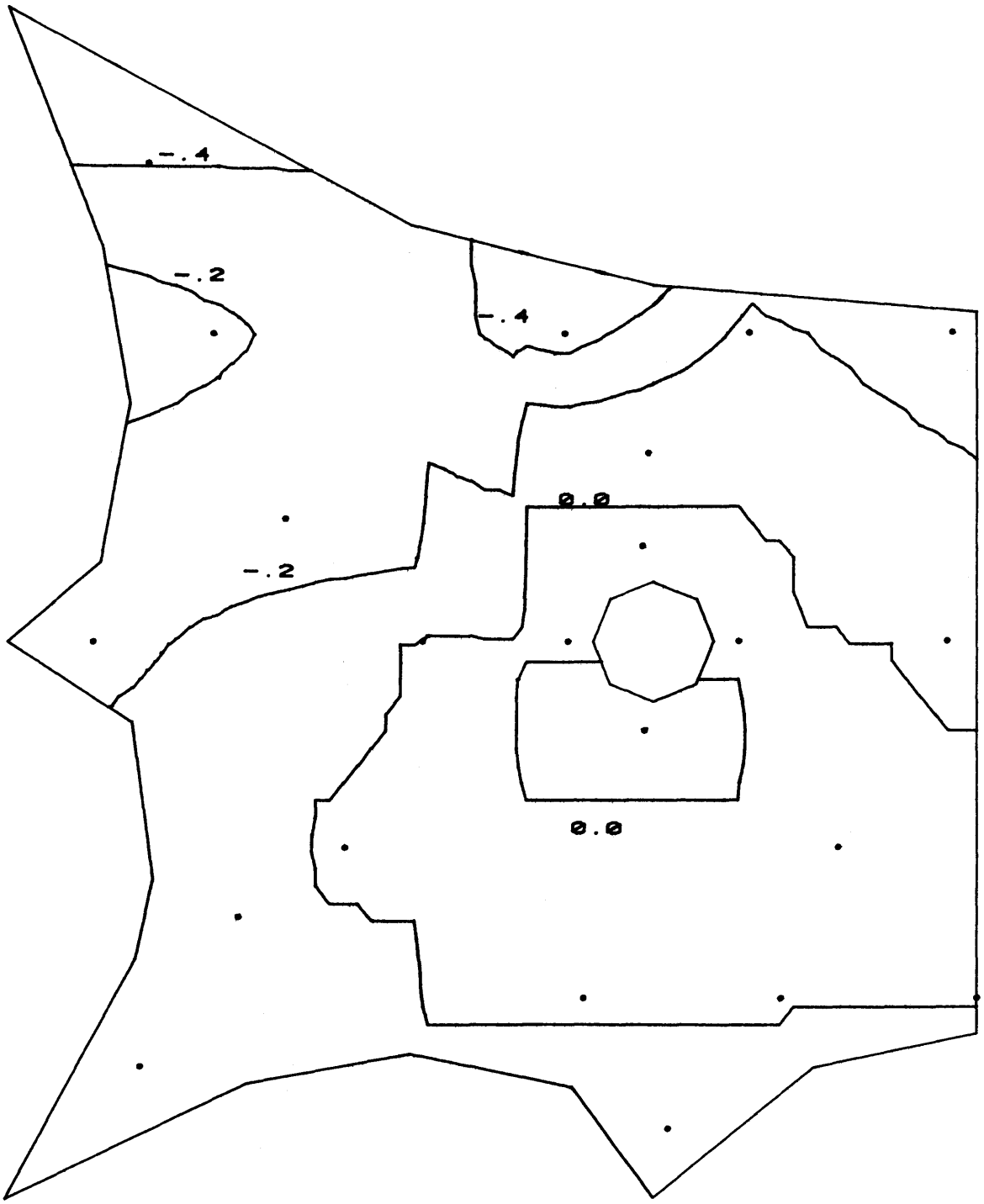


Figure 10m. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : 320
PRESSURE COEFFICIENTS : MAXIMUM
VIEW : TOP

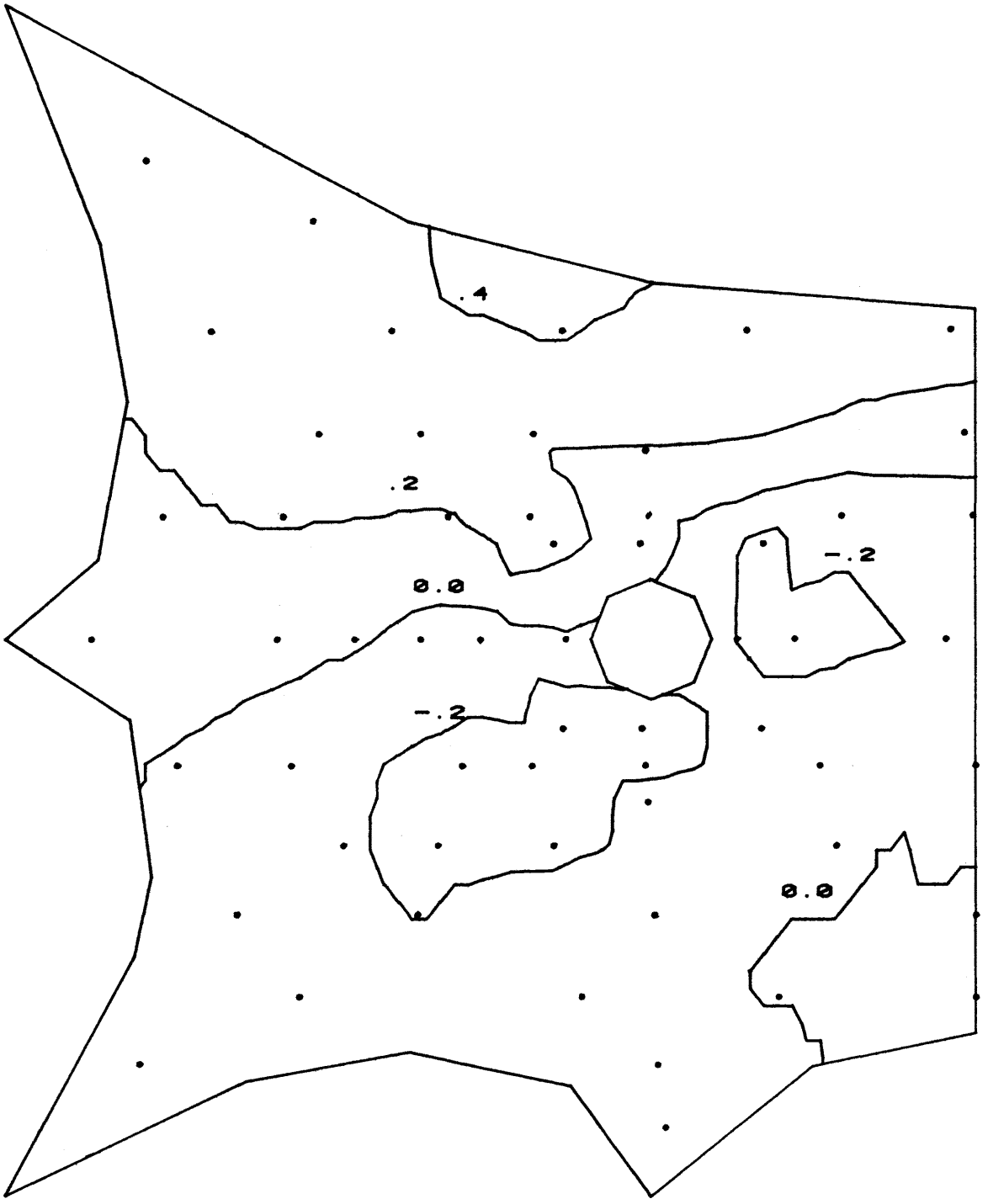


Figure 10n. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : 320
PRESSURE COEFFICIENTS : MAXIMUM
VIEW : BOTTOM

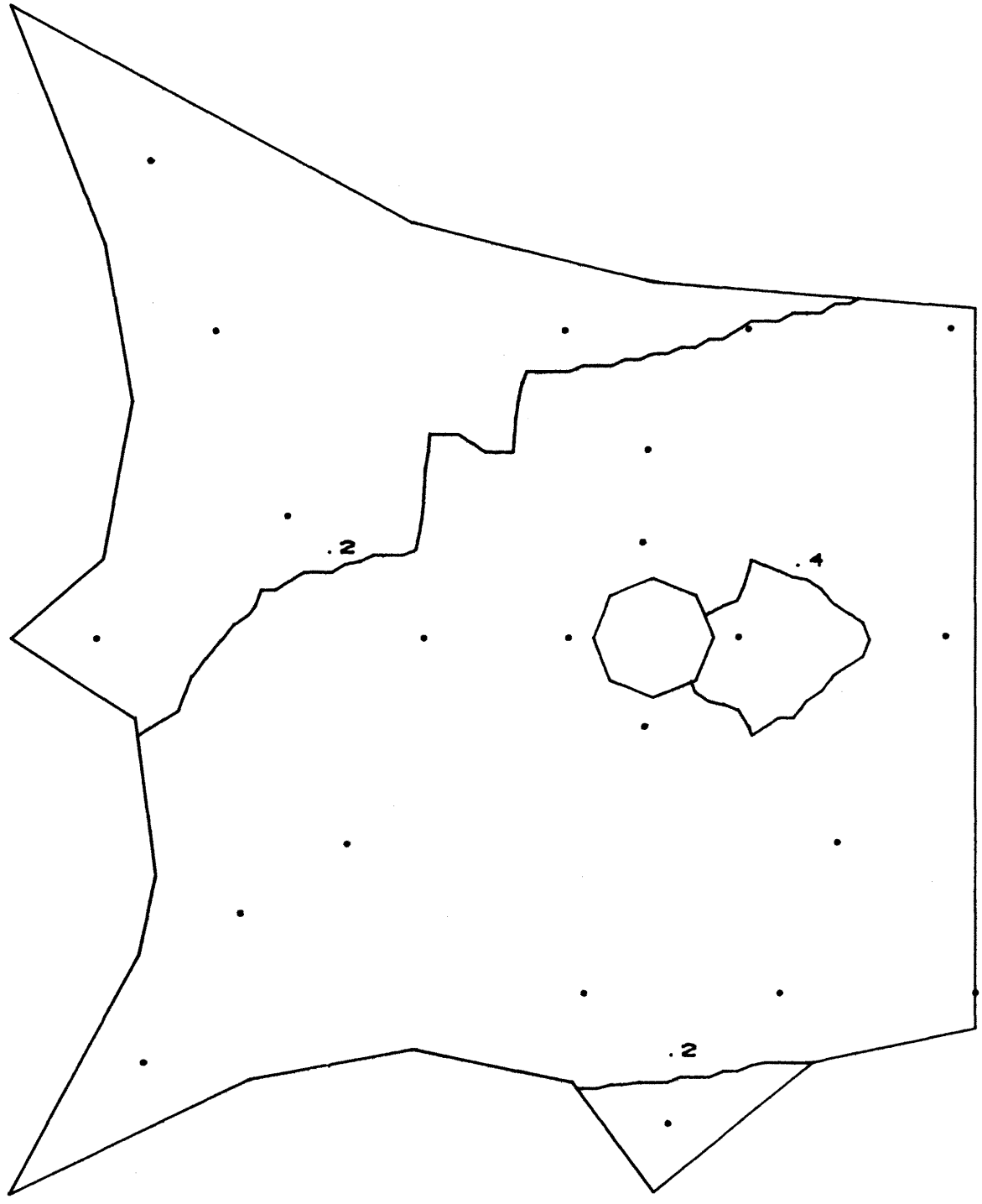


Figure 10o. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : 320
PRESSURE COEFFICIENTS : MEAN
VIEW : TOP

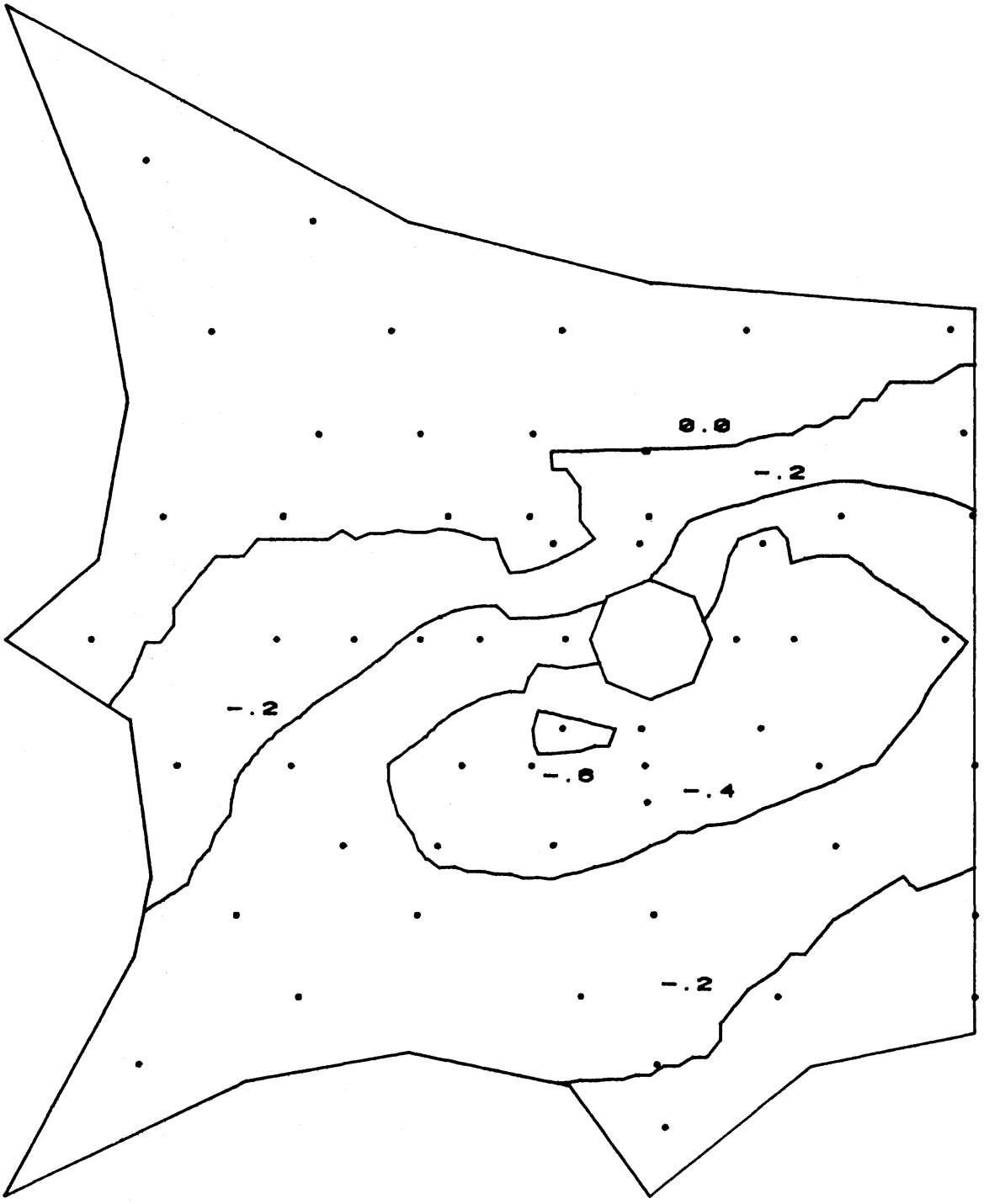


Figure 10p. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : 320
PRESSURE COEFFICIENTS : MEAN
VIEW : BOTTOM

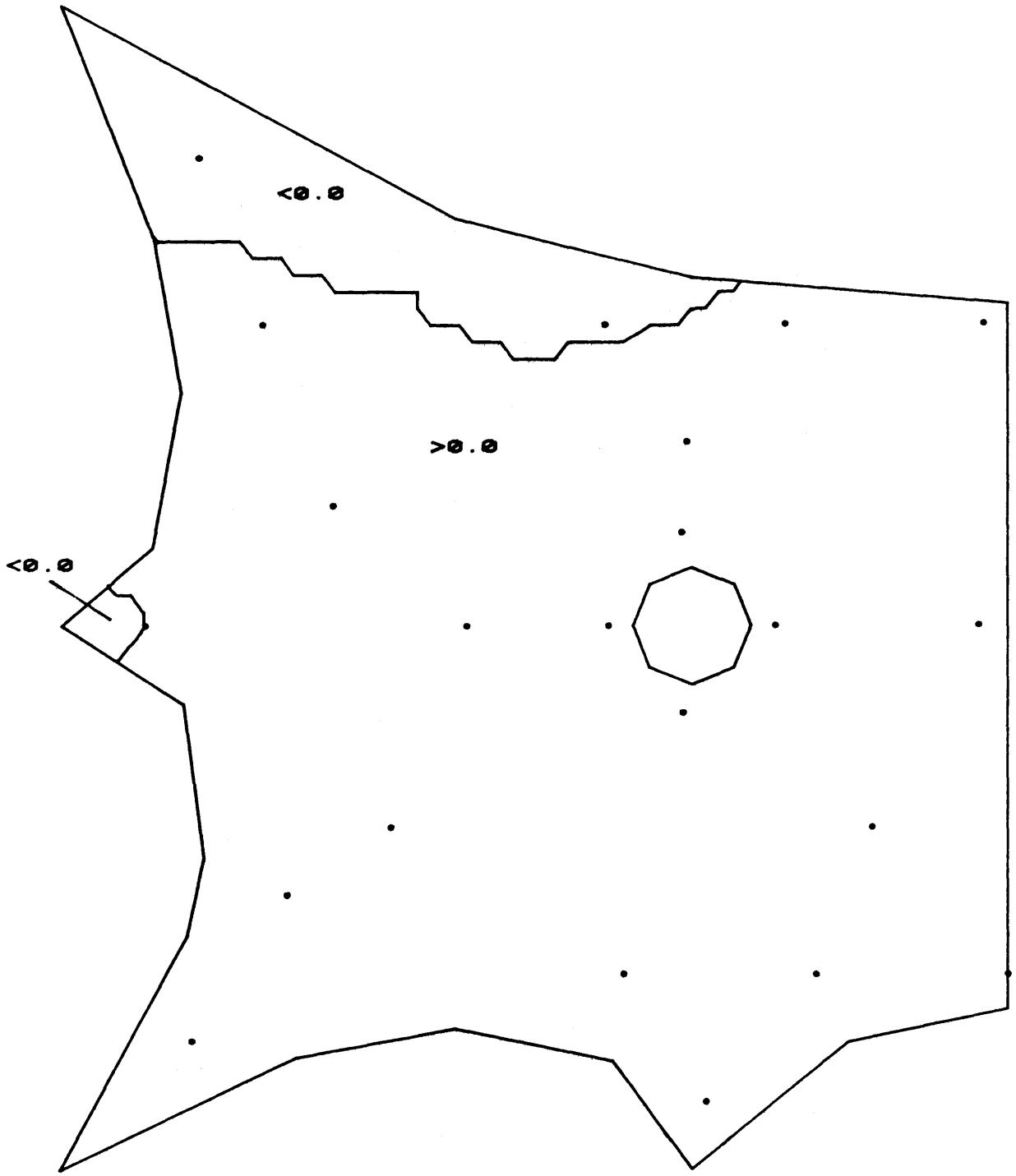


Figure 10q. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : ALL
PRESSURE COEFFICIENTS : MINIMUM
VIEW : TOP

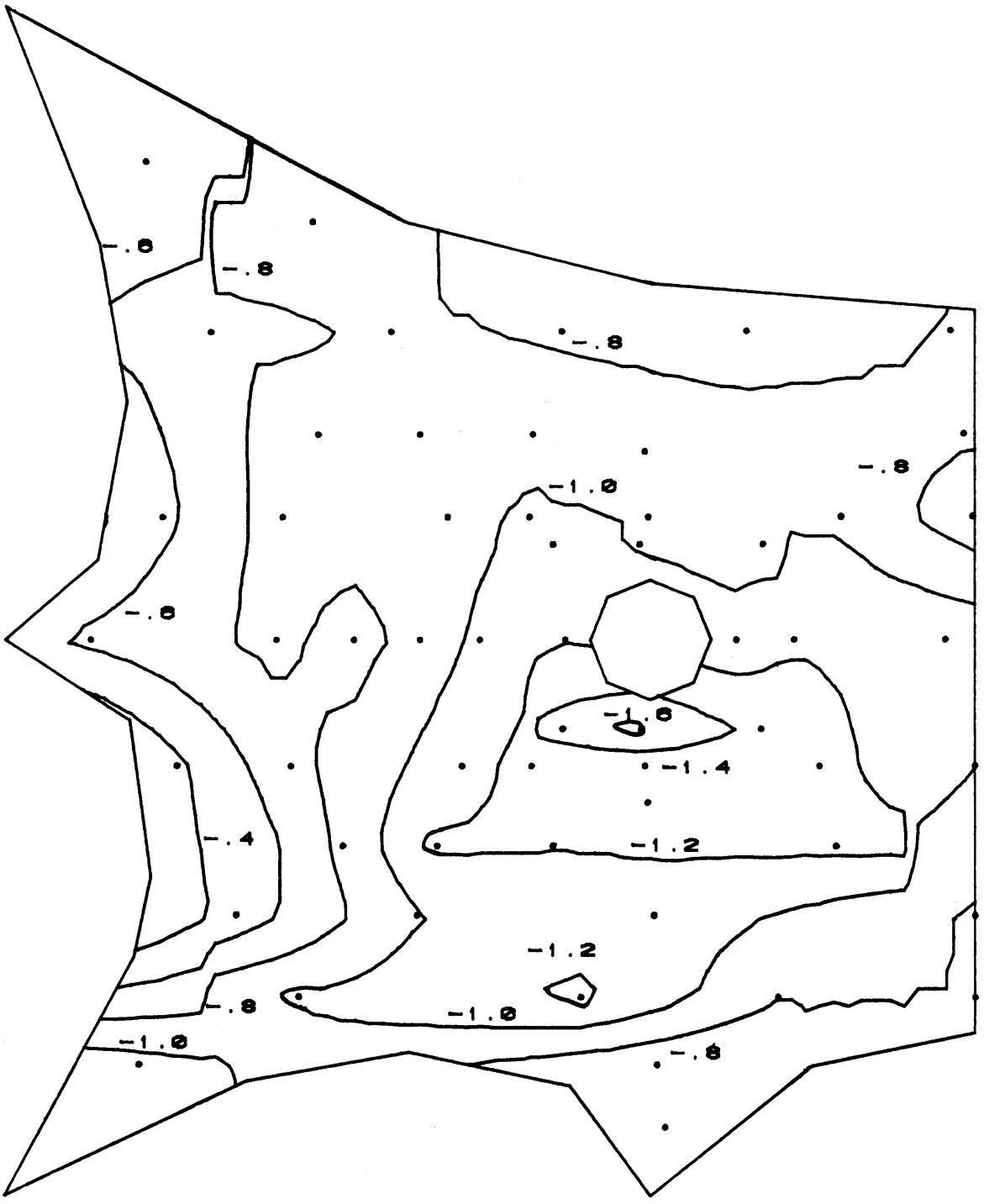


Figure 10r. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : ALL
PRESSURE COEFFICIENTS : MINIMUM
VIEW : BOTTOM

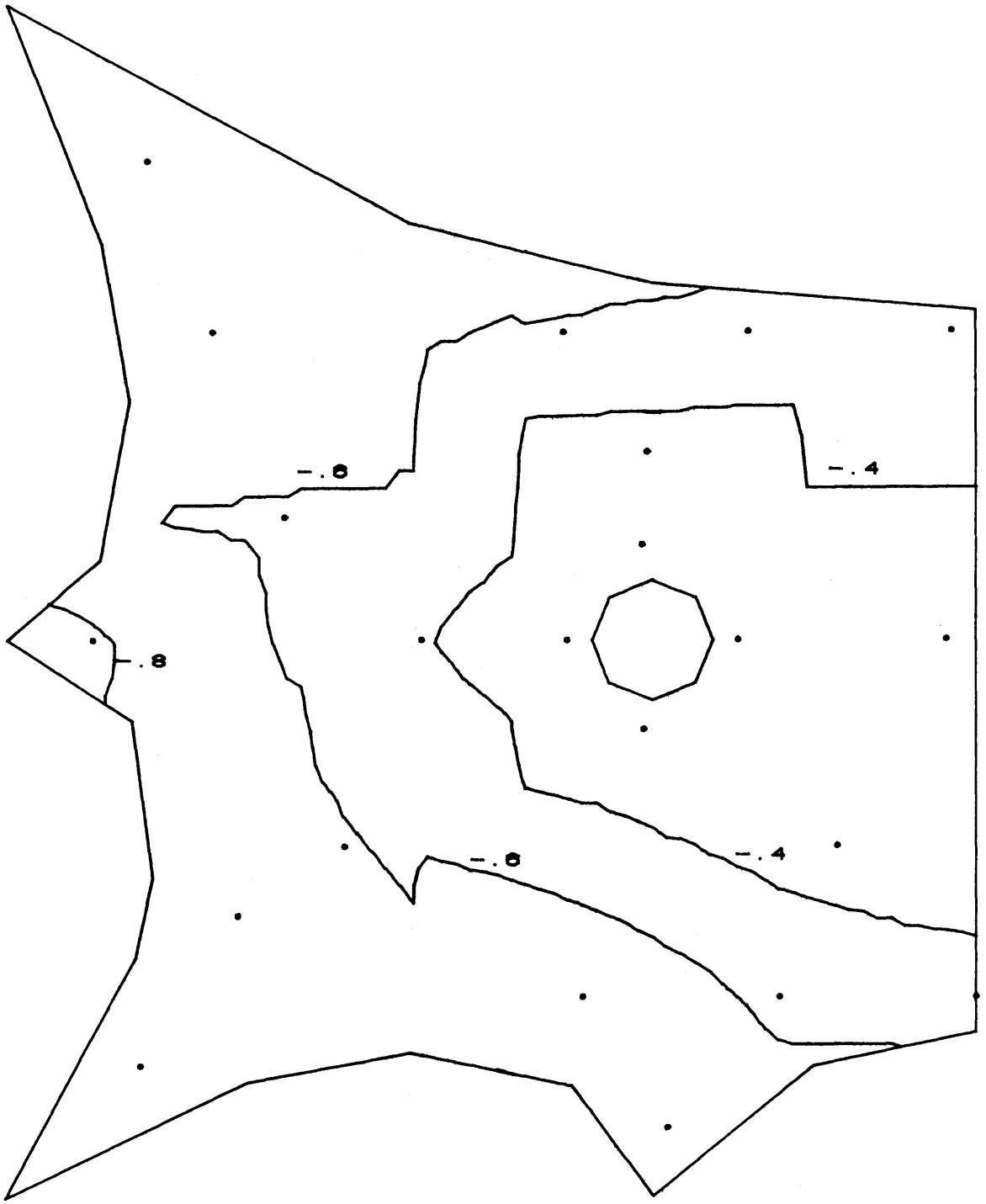


Figure 10s. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : ALL
PRESSURE COEFFICIENTS : MAXIMUM
VIEW : TOP

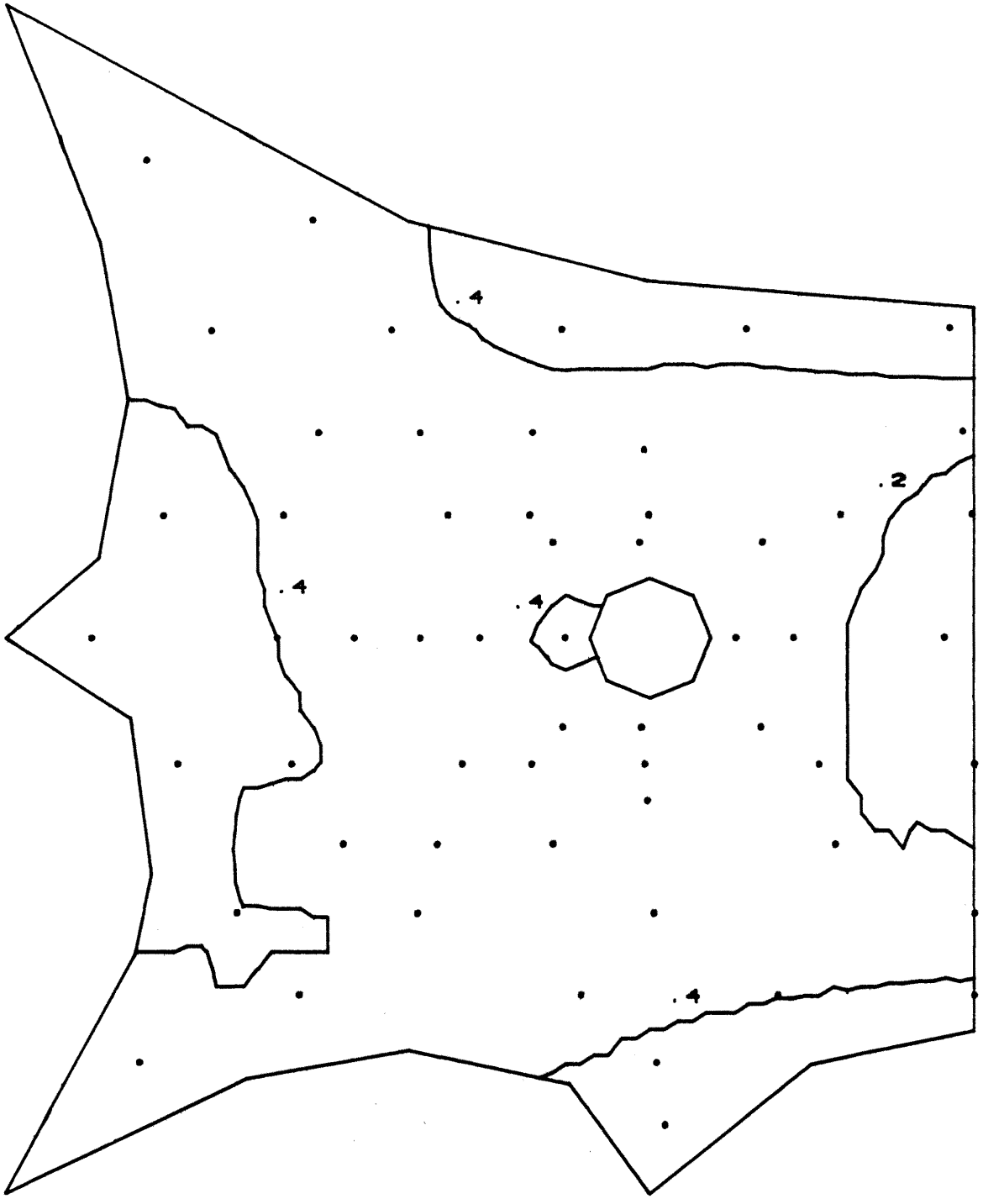


Figure 10t. Peak Pressure Contours on the Model for Cladding Loads

CONFIGURATION : B -- WITH WALL
WIND DIRECTION : ALL
PRESSURE COEFFICIENTS : MAXIMUM
VIEW : BOTTOM

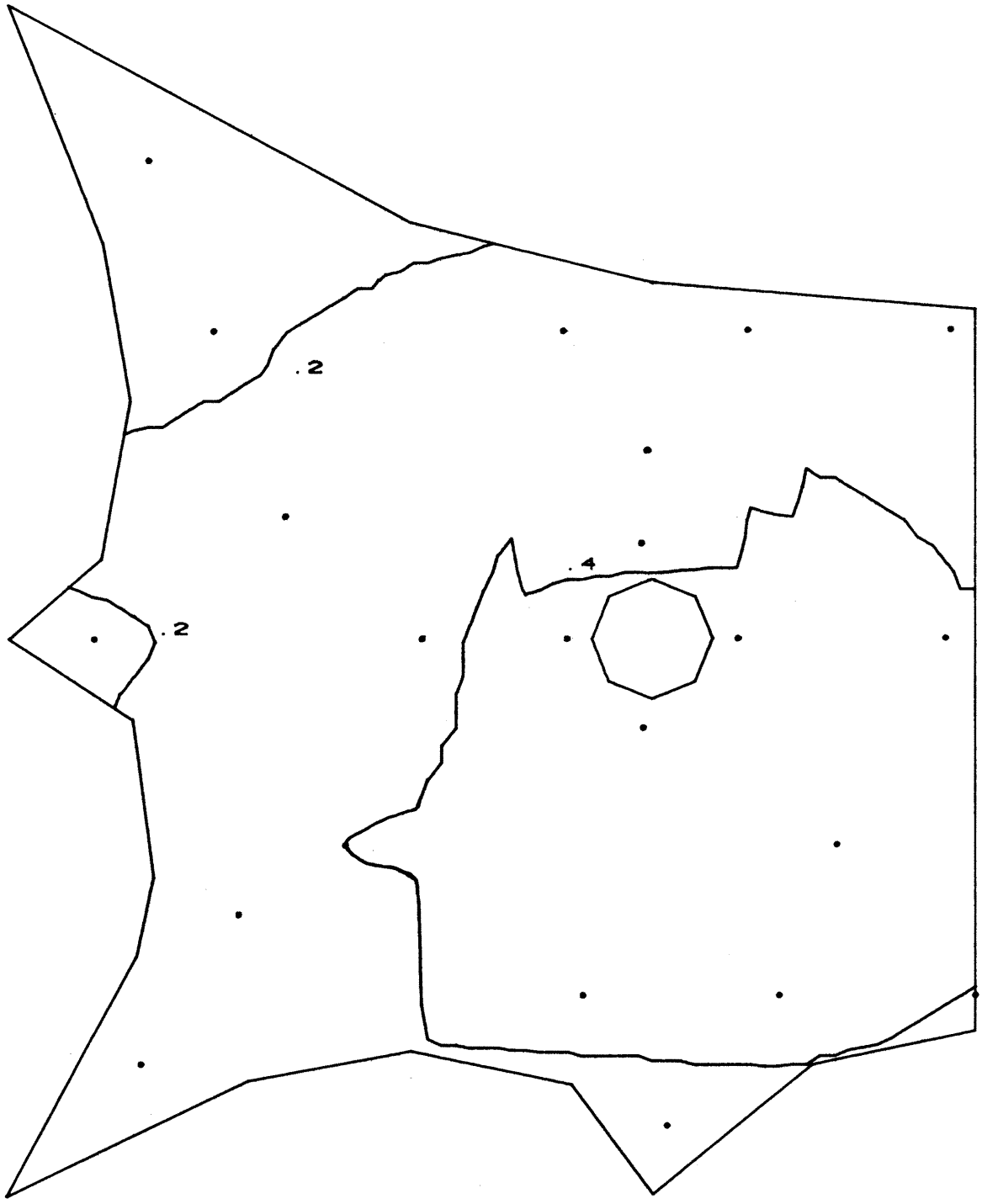


Figure 10u. Peak Pressure Contours on the Model for Cladding Loads

TABLES

TABLE 1

MOTION PICTURE SCENE GUIDE

Run #	Approach Wind Azimuth, degrees
1	0
2	45
3	90
4	135
5	180
6	225
7	270
8	315

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- NO WALL

LOCATION 1

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	41.9	11.9	77.5
22.50	38.9	11.5	73.4
45.00	40.2	10.3	71.2
67.50	41.1	9.9	70.8
90.00	44.4	9.5	73.0
112.50	43.1	9.8	72.5
135.00	48.0	10.1	78.4
157.50	43.9	9.0	70.9
180.00	30.6	11.5	65.2
202.50	40.3	9.3	68.2
225.00	44.3	9.3	72.1
247.50	42.1	9.6	70.9
270.00	39.9	9.4	68.0
292.50	39.8	10.2	70.4
315.00	39.6	10.1	70.1
337.50	37.7	10.6	69.6

LOCATION 2

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	41.7	10.8	74.2
22.50	39.6	10.4	70.7
45.00	38.6	10.1	68.9
67.50	39.3	10.6	71.2
90.00	42.8	9.7	71.8
112.50	45.5	10.5	77.0
135.00	44.3	9.6	73.1
157.50	45.3	11.9	80.9
180.00	41.2	13.8	82.6
202.50	41.2	10.9	74.0
225.00	41.9	9.2	69.6
247.50	43.1	9.8	72.6
270.00	41.8	9.4	70.1
292.50	41.3	10.4	72.4
315.00	37.6	10.6	69.4
337.50	37.9	10.9	70.6

LOCATION 3

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	41.5	10.2	72.2
22.50	41.1	10.6	72.9
45.00	38.4	9.9	68.2
67.50	41.2	10.6	73.1
90.00	41.7	9.9	71.3
112.50	41.1	9.0	68.2
135.00	48.0	9.9	77.8
157.50	42.5	14.1	84.9
180.00	48.3	11.4	82.6
202.50	45.9	9.4	74.0
225.00	48.1	10.3	79.1
247.50	45.7	9.8	75.3
270.00	39.9	9.7	69.0
292.50	39.1	10.1	69.3
315.00	38.4	10.5	70.0
337.50	38.6	10.8	71.1

LOCATION 4

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	44.2	10.4	75.4
22.50	44.0	10.0	74.0
45.00	40.0	9.4	68.2
67.50	42.0	9.4	70.1
90.00	41.4	9.4	69.5
112.50	40.9	7.5	63.4
135.00	51.5	13.2	91.2
157.50	55.4	10.7	87.5
180.00	51.8	9.7	81.0
202.50	48.9	9.6	77.8
225.00	46.9	10.1	77.4
247.50	43.6	9.8	73.0
270.00	41.9	9.9	71.5
292.50	40.7	10.4	71.9
315.00	35.7	10.5	67.2
337.50	41.9	10.8	74.3

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- NO WALL

LOCATION 5

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	44.9	10.9	77.7
22.50	39.6	10.3	70.5
45.00	37.6	10.9	70.2
67.50	39.4	9.9	69.1
90.00	44.6	11.9	80.4
112.50	39.9	10.8	72.4
135.00	44.9	11.2	78.5
157.50	59.3	11.9	95.0
180.00	62.3	15.3	108.3
202.50	57.5	12.6	95.4
225.00	40.4	11.6	75.4
247.50	38.2	10.9	70.9
270.00	39.0	10.8	71.4
292.50	38.2	10.3	69.1
315.00	39.3	10.8	71.8
337.50	41.7	11.4	76.0

LOCATION 6

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	44.6	10.7	76.8
22.50	39.6	10.3	70.3
45.00	35.5	10.4	66.8
67.50	38.3	9.9	67.9
90.00	36.5	10.3	67.3
112.50	34.8	8.4	60.0
135.00	49.8	12.3	86.6
157.50	50.2	14.0	92.3
180.00	52.0	11.9	87.6
202.50	48.3	10.9	80.9
225.00	45.6	10.5	77.0
247.50	48.3	11.5	82.8
270.00	46.3	10.6	78.1
292.50	39.0	10.3	70.0
315.00	39.9	10.7	72.1
337.50	43.2	10.5	74.9

LOCATION 7

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	45.4	10.0	75.4
22.50	42.9	9.9	72.7
45.00	41.7	9.7	70.7
67.50	43.7	10.0	73.6
90.00	37.7	9.1	64.9
112.50	39.8	9.6	68.5
135.00	51.7	13.1	91.1
157.50	59.6	11.7	94.7
180.00	52.6	10.6	84.3
202.50	49.1	10.9	81.7
225.00	46.0	10.4	77.4
247.50	46.2	9.7	75.3
270.00	44.4	10.3	75.3
292.50	41.9	10.1	72.3
315.00	40.5	10.1	70.9
337.50	41.6	10.3	72.5

LOCATION 8

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	50.1	11.1	83.5
22.50	47.0	11.7	82.0
45.00	38.4	10.8	70.7
67.50	36.7	11.5	71.2
90.00	32.4	10.5	64.0
112.50	37.2	10.0	67.1
135.00	48.9	11.1	82.2
157.50	63.7	11.6	98.5
180.00	63.4	12.2	99.9
202.50	61.8	12.1	98.0
225.00	46.7	11.1	80.1
247.50	37.4	11.2	71.0
270.00	32.4	11.6	67.2
292.50	33.6	10.7	65.7
315.00	38.8	11.3	72.7
337.50	41.7	11.8	77.3

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- NO WALL

LOCATION 9

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	48.7	10.5	80.1
22.50	44.3	10.9	76.8
45.00	40.1	9.9	69.9
67.50	35.9	10.5	67.3
90.00	27.4	9.4	55.7
112.50	40.0	10.8	72.3
135.00	56.2	11.8	91.7
157.50	59.4	11.6	94.2
180.00	60.2	11.6	95.0
202.50	54.6	11.2	88.1
225.00	44.2	10.3	74.9
247.50	49.6	10.8	82.0
270.00	44.2	10.6	76.0
292.50	43.9	11.4	78.1
315.00	33.8	10.8	66.2
337.50	41.0	11.3	74.9

LOCATION 10

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	47.5	11.2	81.1
22.50	47.8	10.7	79.8
45.00	40.4	10.0	70.4
67.50	33.8	9.0	60.7
90.00	38.5	9.1	65.9
112.50	45.5	10.4	76.8
135.00	49.3	10.4	80.5
157.50	54.7	10.3	85.5
180.00	54.8	11.1	88.1
202.50	57.0	11.6	92.0
225.00	52.3	10.1	82.5
247.50	45.4	9.9	75.0
270.00	41.8	10.3	72.6
292.50	41.4	12.0	77.5
315.00	34.2	9.9	64.0
337.50	39.8	10.3	70.5

LOCATION 11

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	47.9	9.5	76.4
22.50	51.8	10.4	82.8
45.00	48.1	10.6	80.0
67.50	42.2	9.5	70.7
90.00	43.3	9.5	71.8
112.50	46.5	11.1	79.8
135.00	50.3	11.1	83.6
157.50	60.0	10.6	92.0
180.00	52.6	10.0	82.7
202.50	48.9	10.2	79.5
225.00	42.4	9.8	72.0
247.50	40.5	9.5	69.0
270.00	42.8	10.0	72.8
292.50	41.7	10.0	71.6
315.00	41.8	10.3	72.7
337.50	44.1	9.7	73.2

LOCATION 12

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	55.5	11.7	90.6
22.50	49.7	10.7	81.9
45.00	40.0	9.1	67.5
67.50	41.6	10.3	72.4
90.00	40.3	9.9	70.1
112.50	42.9	10.5	74.4
135.00	47.3	9.8	76.8
157.50	49.2	10.5	80.6
180.00	48.6	9.7	77.7
202.50	48.1	10.4	79.3
225.00	45.2	9.3	72.9
247.50	39.5	9.6	68.3
270.00	39.2	9.9	68.8
292.50	38.7	10.5	70.1
315.00	35.7	9.0	62.8
337.50	48.8	11.4	83.0

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- NO WALL

LOCATION 13

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	50.3	9.1	77.6
22.50	57.0	10.4	88.3
45.00	55.3	10.4	86.5
67.50	45.5	8.6	71.3
90.00	28.2	11.4	62.6
112.50	41.8	15.1	87.1
135.00	49.3	10.8	81.6
157.50	52.4	10.4	83.7
180.00	48.8	10.0	78.8
202.50	44.2	10.0	74.2
225.00	38.3	10.6	70.0
247.50	32.9	9.9	62.7
270.00	32.6	9.1	60.0
292.50	36.6	9.4	64.9
315.00	41.0	9.8	70.4
337.50	48.2	9.8	77.5

LOCATION 14

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	54.9	11.1	88.3
22.50	48.8	10.0	78.8
45.00	44.4	8.7	70.7
67.50	42.4	10.0	72.5
90.00	41.9	11.0	75.0
112.50	43.5	10.2	74.0
135.00	42.1	9.8	71.5
157.50	42.7	9.9	72.5
180.00	41.0	9.9	70.8
202.50	40.9	9.7	70.0
225.00	41.4	9.7	70.6
247.50	44.1	9.4	72.5
270.00	40.4	9.9	70.1
292.50	42.2	10.5	73.8
315.00	42.3	8.7	68.3
337.50	50.1	10.5	81.6

LOCATION 15

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	47.1	8.8	73.6
22.50	44.7	10.2	75.2
45.00	45.7	9.5	74.3
67.50	41.1	7.7	64.2
90.00	44.7	10.0	74.7
112.50	46.5	9.5	75.1
135.00	46.4	9.4	74.7
157.50	45.0	10.1	75.4
180.00	44.3	10.6	76.3
202.50	38.6	10.2	69.1
225.00	36.4	10.5	68.0
247.50	34.5	10.0	64.5
270.00	35.7	9.7	64.8
292.50	38.6	9.5	67.1
315.00	42.7	9.6	71.5
337.50	48.3	9.8	77.6

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- NO WALL

* * GREATEST VALUES * *

LOC	AZ	UMEAN/UINF (PERCENT) MEAN	RMS	M+3RMS	LOC	AZ	URMS/UINF (PERCENT) MEAN	RMS	M+3RMS	LOC	AZ	UMEAN+3*RMS/UINF (PERCENT) MEAN	RMS	M+3RMS
8	157.5	63.7	11.6	98.5	5	180.0	62.3	15.3	108.3	5	180.0	62.3	15.3	108.3
8	180.0	63.4	12.2	99.9	13	112.5	41.8	15.1	87.1	8	180.0	63.4	12.2	99.9
5	180.0	62.3	15.3	108.3	3	157.5	42.5	14.1	84.9	8	157.5	63.7	11.6	98.5
8	202.5	61.8	12.1	98.0	6	157.5	50.2	14.0	92.3	8	202.5	61.8	12.1	98.0
9	180.0	60.2	11.6	95.0	2	180.0	41.2	13.8	82.6	5	202.5	57.5	12.6	95.4
11	157.5	60.0	10.6	92.0	4	135.0	51.5	13.2	91.2	9	180.0	60.2	11.6	95.0
7	157.5	59.6	11.7	94.7	7	135.0	51.7	13.1	91.1	5	157.5	59.3	11.9	95.0
9	157.5	59.4	11.6	94.2	5	202.5	57.5	12.6	95.4	7	157.5	59.6	11.7	94.7
5	157.5	59.3	11.9	95.0	6	135.0	49.8	12.3	86.6	9	157.5	59.4	11.6	94.2
5	202.5	57.5	12.6	95.4	8	180.0	63.4	12.2	99.9	6	157.5	50.2	14.0	92.3

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- WITH WALL

LOCATION 1

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	34.9	11.8	70.3
22.50	36.3	11.3	70.3
45.00	36.5	10.2	66.9
67.50	40.5	9.5	69.0
90.00	43.1	9.5	71.7
112.50	45.4	9.4	73.8
135.00	49.8	10.1	80.1
157.50	39.7	11.6	74.5
180.00	16.3	7.4	38.6
202.50	38.8	10.6	70.6
225.00	48.0	9.8	77.4
247.50	44.3	9.1	71.7
270.00	41.7	9.3	69.7
292.50	38.2	9.9	68.0
315.00	35.9	10.6	67.6
337.50	34.1	10.6	65.9

LOCATION 2

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	30.8	11.6	65.6
22.50	32.1	11.7	67.1
45.00	33.3	10.3	64.2
67.50	37.2	9.8	66.7
90.00	44.2	9.0	71.1
112.50	48.1	10.6	80.0
135.00	47.2	10.4	78.5
157.50	22.8	10.8	55.3
180.00	17.8	9.3	45.8
202.50	22.5	11.3	56.3
225.00	45.0	10.6	76.7
247.50	46.1	9.7	75.2
270.00	42.2	9.4	70.4
292.50	37.0	10.0	66.9
315.00	31.0	10.7	63.2
337.50	30.2	11.0	63.1

LOCATION 3

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	33.1	11.4	67.4
22.50	33.9	10.6	65.8
45.00	36.3	10.4	67.5
67.50	37.8	9.5	66.4
90.00	43.0	9.9	72.7
112.50	44.0	9.4	72.2
135.00	26.1	10.3	57.1
157.50	18.9	7.9	42.7
180.00	15.4	8.2	40.0
202.50	51.3	12.6	89.1
225.00	50.9	10.1	81.3
247.50	47.2	9.8	76.8
270.00	39.3	9.2	66.9
292.50	36.7	10.2	67.4
315.00	33.1	10.5	64.6
337.50	30.0	11.9	65.8

LOCATION 4

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	35.2	11.2	68.7
22.50	37.6	10.5	69.1
45.00	38.9	9.5	67.5
67.50	43.3	9.4	71.6
90.00	41.0	9.0	68.1
112.50	36.4	8.2	60.9
135.00	15.3	7.6	38.0
157.50	16.1	7.4	38.3
180.00	34.9	13.5	75.3
202.50	55.5	10.4	86.7
225.00	51.8	9.6	80.7
247.50	48.2	9.8	77.1
270.00	41.5	9.5	69.9
292.50	37.0	9.7	69.1
315.00	27.6	10.6	59.3
337.50	30.3	11.5	64.9

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- WITH WALL

LOCATION 5

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	23.3	11.4	57.4
22.50	24.6	11.4	58.9
45.00	27.5	11.7	62.7
67.50	34.6	11.0	67.6
90.00	44.6	12.2	81.1
112.50	44.7	11.0	77.7
135.00	30.5	12.1	66.9
157.50	34.7	12.5	72.4
180.00	36.5	14.1	78.9
202.50	32.9	12.7	70.9
225.00	26.9	11.8	62.4
247.50	43.2	12.0	79.2
270.00	37.7	11.3	71.5
292.50	29.2	10.2	59.9
315.00	25.7	10.8	58.1
337.50	21.0	10.6	52.7

LOCATION 6

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	26.0	10.9	58.7
22.50	26.4	10.6	58.3
45.00	29.9	9.0	56.8
67.50	33.4	10.1	63.7
90.00	36.7	10.1	66.9
112.50	39.7	10.9	72.5
135.00	25.6	10.8	58.1
157.50	25.7	12.6	63.6
180.00	24.5	11.0	57.4
202.50	47.1	14.7	91.3
225.00	58.2	11.7	93.2
247.50	49.5	10.3	80.3
270.00	46.7	11.0	79.8
292.50	32.3	10.8	64.6
315.00	25.0	11.6	59.8
337.50	25.3	11.8	60.6

LOCATION 7

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	30.8	10.6	62.6
22.50	36.2	8.9	62.8
45.00	41.5	9.0	68.4
67.50	41.2	9.5	69.6
90.00	36.4	8.9	63.2
112.50	30.5	9.5	59.0
135.00	18.9	10.3	49.8
157.50	15.7	7.5	38.1
180.00	24.3	10.7	56.4
202.50	58.4	12.4	95.7
225.00	50.6	10.2	81.2
247.50	50.3	9.4	78.5
270.00	43.4	9.6	72.1
292.50	35.7	10.6	67.4
315.00	28.4	11.9	64.0
337.50	26.1	10.7	58.1

LOCATION 8

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	17.4	8.9	44.1
22.50	17.9	8.7	44.1
45.00	18.4	8.0	42.3
67.50	29.1	10.4	60.4
90.00	32.9	11.0	66.1
112.50	48.2	12.6	86.2
135.00	18.3	8.5	43.8
157.50	39.7	15.7	86.8
180.00	44.6	17.6	97.5
202.50	37.6	14.9	82.2
225.00	16.7	8.4	41.8
247.50	48.0	11.9	83.8
270.00	31.2	12.0	67.2
292.50	26.0	10.6	57.8
315.00	18.2	8.9	45.0
337.50	16.6	8.7	42.6

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- WITH WALL

LOCATION 9

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	24.0	9.0	51.1
22.50	27.0	9.1	54.3
45.00	27.9	8.9	54.5
67.50	26.1	8.1	50.4
90.00	25.9	9.1	53.2
112.50	30.3	10.4	61.7
135.00	27.4	14.6	71.2
157.50	25.5	11.4	59.8
180.00	23.8	11.3	57.9
202.50	30.4	12.9	69.2
225.00	54.9	10.6	86.5
247.50	57.4	11.3	91.2
270.00	44.3	10.9	76.9
292.50	34.6	12.9	73.4
315.00	16.1	9.3	44.2
337.50	18.0	9.7	47.3

LOCATION 10

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	17.4	7.6	40.2
22.50	18.8	7.9	42.4
45.00	22.1	9.0	49.1
67.50	28.4	9.2	56.0
90.00	35.6	10.4	66.7
112.50	25.0	10.1	55.3
135.00	15.3	6.8	35.7
157.50	14.3	6.0	32.3
180.00	12.3	5.4	28.5
202.50	14.6	6.4	33.9
225.00	15.5	7.6	38.4
247.50	48.6	13.5	89.0
270.00	43.7	11.2	77.5
292.50	26.2	10.6	58.1
315.00	14.9	7.7	38.0
337.50	13.5	6.7	33.5

LOCATION 11

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	41.9	11.4	76.1
22.50	43.4	10.6	75.1
45.00	40.3	9.4	68.4
67.50	37.2	9.2	64.9
90.00	39.9	9.7	69.1
112.50	27.0	10.1	57.2
135.00	17.3	7.7	40.4
157.50	14.6	6.4	33.8
180.00	11.9	5.8	29.2
202.50	17.3	8.1	41.7
225.00	36.6	16.2	85.1
247.50	56.5	10.5	87.9
270.00	42.6	10.0	72.5
292.50	25.8	10.2	56.5
315.00	15.9	7.5	38.4
337.50	26.5	10.8	58.8

LOCATION 12

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	16.9	7.6	39.7
22.50	16.9	7.8	40.4
45.00	23.7	10.8	56.2
67.50	34.5	12.5	72.1
90.00	38.3	10.9	71.1
112.50	36.2	14.6	79.9
135.00	11.5	5.0	26.4
157.50	15.9	6.6	35.6
180.00	15.8	7.3	37.6
202.50	13.2	6.0	31.1
225.00	9.6	4.4	22.7
247.50	33.4	14.2	76.1
270.00	32.9	10.3	63.7
292.50	27.8	11.3	61.9
315.00	17.0	9.4	45.2
337.50	14.8	7.3	36.7

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- WITH WALL

LOCATION 13

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	15.9	8.1	40.2
22.50	19.9	8.7	46.0
45.00	15.5	6.2	34.1
67.50	13.8	6.6	33.5
90.00	18.2	7.9	41.8
112.50	27.8	11.6	62.7
135.00	36.9	14.7	81.0
157.50	50.4	14.8	94.8
180.00	53.6	11.6	88.3
202.50	51.0	10.0	81.1
225.00	38.4	9.6	67.3
247.50	28.4	9.1	55.8
270.00	29.7	9.3	57.7
292.50	42.7	9.2	70.4
315.00	56.6	11.3	90.5
337.50	28.9	19.5	87.4

LOCATION 14

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	25.6	9.8	55.0
22.50	14.0	6.7	34.3
45.00	13.9	6.2	32.5
67.50	36.1	13.7	77.0
90.00	38.5	9.5	67.0
112.50	39.6	10.8	71.9
135.00	29.1	11.7	64.2
157.50	19.4	9.0	46.3
180.00	16.2	7.3	38.1
202.50	19.8	9.2	47.3
225.00	31.9	10.8	64.3
247.50	36.8	10.5	68.2
270.00	36.6	9.3	64.6
292.50	36.8	12.0	72.8
315.00	11.0	4.9	25.6
337.50	13.6	6.4	32.8

LOCATION 15

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	18.2	8.2	42.8
22.50	35.0	13.2	74.5
45.00	21.6	8.8	48.1
67.50	35.5	10.8	67.8
90.00	45.3	10.0	75.2
112.50	46.0	8.9	72.8
135.00	45.9	9.2	73.7
157.50	44.6	9.6	73.4
180.00	41.8	10.0	71.6
202.50	34.3	10.2	64.8
225.00	29.3	10.2	60.0
247.50	31.6	10.4	62.7
270.00	35.5	10.0	65.6
292.50	43.0	9.4	71.3
315.00	52.6	9.6	81.4
337.50	34.7	18.6	90.4

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

HELIOS TENSION STRUCTURE -- WITH WALL

* * GREATEST VALUES * *

UMEAN/UINF (PERCENT)

LOC	AZ	MEAN	RMS	M+3RMS
7	202.5	58.4	12.4	95.7
6	225.0	58.2	11.7	93.2
9	247.5	57.4	11.3	91.2
13	315.0	56.6	11.3	90.5
11	247.5	56.5	10.5	87.9
4	202.5	55.5	10.4	86.7
9	225.0	54.9	10.6	86.5
13	180.0	53.6	11.6	88.3
15	315.0	52.6	9.6	81.4
4	225.0	51.8	9.6	80.7

URMS/UINF (PERCENT)

LOC	AZ	MEAN	RMS	M+3RMS
13	337.5	28.9	19.5	87.4
15	337.5	34.7	18.6	90.4
8	180.0	44.6	17.6	97.5
11	225.0	36.6	16.2	85.1
8	157.5	39.7	15.7	86.8
8	202.5	37.6	14.9	82.2
13	157.5	50.4	14.8	94.8
6	202.5	47.1	14.7	91.3
13	135.0	36.9	14.7	81.0
9	135.0	27.4	14.6	71.2

UMEAN+3*RMS/UINF (PERCENT)

LOC	AZ	MEAN	RMS	M+3RMS
8	180.0	44.6	17.6	97.5
7	202.5	58.4	12.4	95.7
13	157.5	50.4	14.8	94.8
6	225.0	58.2	11.7	93.2
6	202.5	47.1	14.7	91.3
9	247.5	57.4	11.3	91.2
13	315.0	56.6	11.3	90.5
15	337.5	34.7	18.6	90.4
3	202.5	51.3	12.6	89.1
10	247.5	48.6	13.5	89.0

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED

LOS ANGELES, CALIFORNIA INT. ARPRT (1965-1974)

SEASON : ANNUAL NO OF OBS.= 29215 HT. OF MEAS.= 20. FT.

VELOCITY LEVELS IN MPH

DIRECTION	0- 3	4- 7	8-12	13-18	19-24	25-31	32 +	TOTAL
N	.70	1.70	.70	.30	.10	0.00	0.00	3.60
NNE	.50	1.30	.50	.10	0.00	0.00	0.00	2.40
NE	.60	2.10	.70	.10	0.00	0.00	0.00	3.50
ENE	.90	2.80	.80	.10	0.00	0.00	0.00	4.50
E	1.60	6.00	2.10	.30	0.00	0.00	0.00	10.00
ESE	1.00	3.00	1.00	.20	0.00	0.00	0.00	5.20
SE	.70	1.80	.80	.10	0.00	0.00	0.00	3.40
SSE	.70	1.30	.40	.10	0.00	0.00	0.00	2.50
S	.90	2.00	.50	.10	0.00	0.00	0.00	3.40
SSW	.40	1.00	.40	.10	0.00	0.00	0.00	2.00
SW	.70	2.30	2.20	.80	0.00	0.00	0.00	6.10
WSW	.90	5.50	10.30	5.50	.20	0.00	0.00	22.40
W	.90	4.70	10.30	7.00	.50	.10	0.00	23.50
WNW	.40	1.10	.80	.20	0.00	0.00	0.00	2.50
NW	.40	1.10	.40	.10	0.00	0.00	0.00	2.00
NNW	.40	1.00	.30	.30	.10	0.00	0.00	2.10
CALM	.80	0.00	0.00	0.00	0.00	0.00	0.00	.80
TOT	12.40	38.70	32.30	15.40	1.00	.20	0.00	100.00

TABLE 4

SUMMARY OF WIND EFFECTS ON PEOPLE

	Beaufort number	Speed (mph)	Effects
Calm, light air	0, 1	0- 3	Calm, no noticeable wind
Light breeze	2	4- 7	Wind felt on face
Gentle breeze	3	8-12	Wind extends light flag Hair is disturbed Clothing flaps
Moderate breeze	4	13-18	Raises dust, dry soil and loose paper Hair disarranged
Fresh breeze	5	19-24	Force of wind felt on body Drifting snow becomes airborne Limit of agreeable wind on land
Strong breeze	6	25-31	Umbrellas used with difficulty Hair blown straight Difficult to walk steadily Wind noise on ears unpleasant Windborne snow above head height (blizzard)
Near gale	7	32-38	Inconvenience felt when walking
Gale	8	39-46	Generally impedes progress Great difficulty with balance in gusts
Strong gale	9	47-54	People blown over by gusts

Note: Table from Reference 4, p. 40.

TABLE 5.

CALCULATION OF REFERENCE PRESSURE

1. Basic wind speed minimum:

   Fastest mile at 30 ft = 70 mph

   Mean hourly wind speed = 70/1.27 = 55.1 mph

   Mean hourly gradient wind speed = $55.1 \left(\frac{1000}{30}\right)^{.17}$ = 100.0 mph

   Mean hourly wind at wind tunnel velocity reference location at 400 ft (50 in model at 1:96 sclae):

   $U(400) = 100.0 \left(\frac{400}{1150}\right)^{.20}$ = 81.0 mph

   Reference pressure = $0.00256(81.0)^2$ = 16.8 psf

   Use 17 psf

2. Loads for other wind velocities:

Fastest mile speed	Multiply loads by
80	$(80/70)^2$ = 1.31
90	$(90/70)^2$ = 1.65
100	$(100/70)^2$ = 2.04
110	$(110/70)^2$ = 2.47

3. Gust load factors to convert hourly mean integrated loads to various gust durations (see sect. 4.4):

Gust Duration, Sec	Gust Load Factor
2-3	$(1.6)^2$ = 2.56
5-7	$(1.5)^2$ = 2.25
10-15	$(1.4)^2$ = 1.96

Table 7 used a gust load factor of 2.25.

TABLE 6A. PEAK LOADS FOR CONFIGURATION A : HELIOS TENSION STRUCTURE
LARGEST VALUES OF CLADDING LOAD REFERENCE PRESSURE = 17.0 PSF

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK PSF	POSITIVE PEAK PSF
101	280	.60	-9.3	10.3
102	340	-.62	-10.5	9.3
103	350	-.69	-11.8	5.5
104	350	-1.18	-20.1	8.4
105	20	-1.01	-17.2	9.7
106	350	-.89	-15.1	9.7
107	20	-.68	-11.6	8.8
108	340	-1.05	-17.9	7.0
109	30	-.66	-11.2	7.4
110	340	-.95	-16.2	6.1
111	10	-1.08	-18.4	7.6
112	40	-.98	-16.7	6.7
113	340	-1.29	-21.9	4.0
114	350	-1.27	-21.6	6.6
115	20	-1.03	-17.6	7.3
116	40	-1.22	-20.7	6.0
117	60	-.51	-8.6	8.0
118	20	-1.12	-19.1	6.2
119	330	-1.18	-20.1	4.1
120	350	-.84	-14.2	2.8
121	330	-1.35	-23.0	5.1
122	0	-1.15	-19.5	6.2
123	40	-.65	-11.1	7.0
124	330	-1.49	-25.3	5.4
125	70	-1.14	-19.3	5.8
126	330	-1.55	-26.3	6.3
127	60	-.93	-15.8	7.0
128	70	-.62	-10.6	6.1
129	120	-1.14	-19.4	6.0
130	0	-1.10	-18.7	7.0
131	250	-1.18	-20.1	4.0
132	340	-.97	-16.5	1.9
133	330	-1.06	-18.0	6.3
134	60	-.98	-16.7	5.5
135	180	-.60	-10.2	9.2
136	130	-1.33	-22.6	5.6
137	200	-.94	-16.0	5.6
138	120	-.98	-16.6	6.4
139	140	-.86	-14.6	6.3
140	120	-.99	-16.8	5.9
141	140	-1.01	-17.2	5.2
142	230	-.90	-15.2	4.6
143	190	-.71	-12.0	3.5
144	150	-.91	-15.5	6.2
145	130	-.65	-11.0	8.6
146	130	-1.00	-17.1	6.3
147	150	-.86	-14.6	6.6
148	130	-.98	-16.7	6.2
149	150	-.92	-15.7	3.8
150	160	-.81	-13.8	5.5
151	170	-.69	-11.7	9.9
152	220	-.74	-12.6	9.7
153	190	-.91	-15.4	7.4
154	160	-.74	-12.6	6.6
155	150	-.68	-11.6	7.2
156	60	-.95	-16.1	7.0
157	180	-.45	-7.6	3.2
201	210	-1.03	-17.6	2.4
203	190	-.77	-13.1	.5
204	240	-.92	-15.7	4.5
205	190	-.70	-12.0	6.2
206	160	-.52	-8.9	4.3
209	270	-.74	-12.6	2.3
212	200	-.71	-12.0	4.3
213	190	-.49	-8.3	6.6
226	200	.44	-4.7	7.4
230	200	.52	-4.9	8.8
232	160	-.51	-8.8	8.8
233	160	.51	-4.6	8.7
234	200	-.43	-7.3	8.4
235	190	-.92	-15.7	2.3
236	170	.38	-4.9	6.5
239	270	-.79	-13.4	3.5
246	160	-.37	-6.3	5.4
251	340	-.63	-10.8	3.7
252	340	-.57	-9.7	3.4
253	320	-.78	-13.2	4.5
255	300	-.73	-12.4	2.6
257	0	-.90	-15.4	.5

TABLE 6A. PEAK LOADS FOR CONFIGURATION A : HELIOS TENSION STRUCTURE
LARGEST VALUES OF CLADDING LOAD REFERENCE PRESSURE = 17.0 PSF

* * 15 GREATEST PRESSURE COEFFICIENT MAGNITUDES * *

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK ---- PSF	POSITIVE PEAK ----
126	330	-1.55	-26.3	6.3
124	330	-1.49	-25.3	5.4
121	330	-1.35	-23.0	5.1
136	130	-1.33	-22.6	5.6
113	340	-1.29	-21.9	4.0
114	350	-1.27	-21.6	6.6
116	40	-1.22	-20.7	6.0
119	330	-1.18	-20.1	4.1
131	250	-1.18	-20.1	4.0
104	350	-1.18	-20.1	8.4
122	0	-1.15	-19.5	6.2
129	120	-1.14	-19.4	6.0
125	70	-1.14	-19.3	5.8
118	20	-1.12	-19.1	6.2
130	0	-1.10	-18.7	7.0

TABLE 6A. PEAK LOADS FOR CONFIGURATION B : HELIOS TENSION STRUCTURE
LARGEST VALUES OF CLADDING LOAD REFERENCE PRESSURE = 17.0 PSF

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK PSF	POSITIVE PEAK PSF
101	300	-.64	-10.8	7.7
102	350	-.66	-11.1	7.2
103	350	-1.08	-18.3	5.1
104	350	-1.25	-21.3	6.5
105	0	-.82	-14.0	6.9
106	10	-.80	-13.6	7.6
107	30	-1.02	-17.3	6.8
108	340	-1.13	-19.2	5.8
109	330	-.48	-8.2	7.2
110	20	-.78	-13.3	4.4
111	30	-.99	-16.9	6.6
112	40	-.86	-14.6	5.8
113	0	-1.25	-21.3	3.8
114	10	-1.22	-20.7	5.3
115	30	-1.24	-21.0	6.2
116	20	-1.34	-22.7	4.9
117	0	.47	-6.2	8.1
118	40	-1.13	-19.2	5.5
119	340	-1.28	-21.7	3.7
120	0	-1.01	-17.1	2.4
121	330	-1.29	-21.9	4.2
122	10	-1.28	-21.8	5.5
123	40	-.75	-12.8	7.3
124	340	-1.36	-23.1	5.7
125	10	-1.48	-25.2	5.7
126	320	-1.60	-27.3	6.1
127	130	-.86	-14.6	6.9
128	140	-.72	-12.3	6.1
129	70	-1.05	-17.9	6.2
130	350	-1.20	-20.4	7.6
131	10	-1.19	-20.3	4.1
132	0	-1.15	-19.5	2.3
133	0	-1.07	-18.2	6.0
134	70	-.88	-15.0	5.2
135	10	-.65	-11.0	9.3
136	210	-.99	-16.8	6.5
137	330	-.93	-15.8	4.3
138	40	-1.08	-18.3	6.0
139	140	-.90	-15.3	6.4
140	110	-1.04	-17.7	5.9
141	220	-.99	-16.8	4.6
142	270	-.97	-16.5	4.2
143	220	-.68	-11.5	2.6
144	150	-.90	-15.3	5.3
145	130	-.56	-9.5	8.5
146	210	-.92	-15.6	5.0
147	150	-.90	-15.3	6.1
148	190	-.94	-16.0	5.7
149	190	-.84	-14.3	4.0
150	160	-.85	-14.5	5.3
151	160	-.81	-13.8	9.6
152	230	-.69	-11.8	8.0
153	190	-.77	-13.1	7.8
154	170	-.85	-14.4	6.2
155	160	-.71	-12.1	5.9
156	60	-.96	-16.4	6.7
157	160	-.48	-8.1	3.7
201	190	-.72	-12.2	5.3
203	240	-.70	-11.9	5.6
204	210	-.82	-13.9	8.2
205	170	-.55	-9.3	8.8
206	230	-.53	-9.0	6.7
209	260	-.76	-12.9	5.0
212	250	-.62	-10.6	6.8
213	160	.50	-5.3	8.5
226	170	.45	-5.0	7.6
230	180	.51	-4.9	8.6
232	200	.44	-5.3	7.6
233	210	.60	-4.9	10.2
234	240	-.41	-7.1	6.2
235	260	-.84	-14.2	8.8
236	190	.34	-5.2	5.7
239	260	-.60	-10.2	4.5
246	170	-.34	-5.7	5.5
251	30	-.51	-8.6	5.1
252	20	-.53	-9.0	4.9
253	0	-.57	-9.8	5.8
255	250	-.70	-12.0	2.8
257	260	-.77	-13.1	1.8

TABLE 6A. PEAK LOADS FOR CONFIGURATION B : HELIOS TENSION STRUCTURE
LARGEST VALUES OF CLADDING LOAD REFERENCE PRESSURE = 17.0 PSF

* * 15 GREATEST PRESSURE COEFFICIENT MAGNITUDES * *

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK ---- PSF	POSITIVE PEAK ----
126	320	-1.60	-27.3	6.1
125	10	-1.48	-25.2	5.7
124	340	-1.36	-23.1	5.7
116	20	-1.34	-22.7	4.9
121	330	-1.29	-21.9	4.2
122	10	-1.28	-21.8	5.5
119	340	-1.28	-21.7	3.7
113	0	-1.25	-21.3	3.8
104	350	-1.25	-21.3	6.5
115	30	-1.24	-21.0	6.2
114	10	-1.22	-20.7	5.3
130	350	-1.20	-20.4	7.6
131	10	-1.19	-20.3	4.1
132	0	-1.15	-19.5	2.3
118	40	-1.13	-19.2	5.5

TABLE 6A. PEAK LOADS FOR CONFIGURATION A : HELIOS TENSION STRUCTURE
LARGEST VALUES OF CLADDING LOAD REFERENCE PRESSURE = 1.0 PSF

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK ---- PSF	POSITIVE PEAK ----
101	280	.60	-.55	.60
102	340	-.62	-.62	.55
103	350	-.69	-.69	.32
104	350	-1.18	-1.18	.49
105	20	-1.01	-1.01	.57
106	350	-.89	-.89	.57
107	20	-.68	-.68	.52
108	340	-1.05	-1.05	.41
109	30	-.66	-.66	.44
110	340	-.95	-.95	.36
111	10	-1.08	-1.08	.44
112	40	-.98	-.98	.39
113	340	-1.29	-1.29	.23
114	350	-1.27	-1.27	.39
115	20	-1.03	-1.03	.43
116	40	-1.22	-1.22	.36
117	60	-.51	-.51	.47
118	20	-1.12	-1.12	.36
119	330	-1.18	-1.18	.24
120	350	-.84	-.84	.16
121	330	-1.35	-1.35	.30
122	0	-1.15	-1.15	.37
123	40	-.65	-.65	.41
124	330	-1.49	-1.49	.32
125	70	-1.14	-1.14	.34
126	330	-1.55	-1.55	.37
127	60	-.93	-.93	.41
128	70	-.62	-.62	.36
129	120	-1.14	-1.14	.35
130	0	-1.10	-1.10	.41
131	250	-1.18	-1.18	.24
132	340	-.97	-.97	.11
133	330	-1.06	-1.06	.37
134	60	-.98	-.98	.32
135	180	-.60	-.60	.54
136	130	-1.33	-1.33	.33
137	200	-.94	-.94	.33
138	120	-.98	-.98	.38
139	140	-.86	-.86	.37
140	120	-.99	-.99	.35
141	140	-1.01	-1.01	.31
142	230	-.90	-.90	.27
143	190	-.71	-.71	.21
144	150	-.91	-.91	.36
145	130	-.65	-.65	.50
146	130	-1.00	-1.00	.37
147	150	-.86	-.86	.39
148	130	-.98	-.98	.37
149	150	-.92	-.92	.22
150	160	-.81	-.81	.32
151	170	-.69	-.69	.58
152	220	-.74	-.74	.57
153	190	-.91	-.91	.43
154	160	-.74	-.74	.39
155	150	-.68	-.68	.43
156	60	-.95	-.95	.41
157	180	-.45	-.45	.19
201	210	-1.03	-1.03	.14
203	190	-.77	-.77	.03
204	240	-.92	-.92	.27
205	190	-.70	-.70	.36
206	160	-.52	-.52	.25
209	270	-.74	-.74	.12
212	200	-.71	-.71	.25
213	190	-.49	-.49	.39
226	200	.44	-.28	.44
230	200	.52	-.29	.52
232	160	-.51	-.51	.28
233	160	.51	-.27	.51
234	200	-.43	-.43	.26
235	190	-.92	-.92	.14
236	170	.38	-.29	.38
239	270	-.79	-.79	.21
246	160	-.37	-.37	.32
251	340	-.63	-.63	.22
252	340	-.57	-.57	.20
253	320	-.78	-.78	.26
255	300	-.73	-.73	.15
257	0	-.90	-.90	.03

TABLE 6A. PEAK LOADS FOR CONFIGURATION A : HELIOS TENSION STRUCTURE
LARGEST VALUES OF CLADDING LOAD REFERENCE PRESSURE = 1.0 PSF

* * 15 GREATEST PRESSURE COEFFICIENT MAGNITUDES * *

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK PSF	POSITIVE PEAK PSF
126	330	-1.55	-1.55	.37
124	330	-1.49	-1.49	.32
121	330	-1.35	-1.35	.30
136	130	-1.33	-1.33	.33
113	340	-1.29	-1.29	.23
114	350	-1.27	-1.27	.39
116	10	-1.22	-1.22	.36
119	330	-1.18	-1.18	.24
131	250	-1.18	-1.18	.24
104	350	-1.18	-1.18	.49
122	0	-1.15	-1.15	.37
129	120	-1.14	-1.14	.35
125	70	-1.14	-1.14	.34
118	20	-1.12	-1.12	.36
130	0	-1.10	-1.10	.41

TABLE 6A. PEAK LOADS FOR CONFIGURATION B : HELIOS TENSION STRUCTURE
LARGEST VALUES OF CLADDING LOAD REFERENCE PRESSURE = 1.0 PSF

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK PSF	POSITIVE PEAK PSF
101	300	-.64	-.64	.46
102	350	-.66	-.66	.42
103	350	-1.08	-1.08	.30
104	350	-1.25	-1.25	.38
105	0	-.82	-.82	.40
106	10	-.80	-.80	.45
107	30	-1.02	-1.02	.40
108	340	-1.13	-1.13	.34
109	330	-.48	-.48	.43
110	20	-.78	-.78	.26
111	30	-.99	-.99	.39
112	40	-.86	-.86	.34
113	0	-1.25	-1.25	.22
114	10	-1.22	-1.22	.31
115	30	-1.24	-1.24	.36
116	20	-1.34	-1.34	.29
117	0	.47	-.37	.47
118	40	-1.13	-1.13	.32
119	340	-1.28	-1.28	.22
120	0	-1.01	-1.01	.14
121	330	-1.29	-1.29	.25
122	10	-1.28	-1.28	.32
123	40	-.75	-.75	.43
124	340	-1.36	-1.36	.34
125	10	-1.48	-1.48	.34
126	320	-1.60	-1.60	.36
127	130	-.86	-.86	.40
128	140	-.72	-.72	.36
129	70	-1.05	-1.05	.36
130	350	-1.20	-1.20	.44
131	10	-1.19	-1.19	.24
132	0	-1.15	-1.15	.13
133	0	-1.07	-1.07	.35
134	70	-.88	-.88	.31
135	10	-.65	-.65	.55
136	210	-.99	-.99	.38
137	330	-.93	-.93	.25
138	40	-1.08	-1.08	.35
139	140	-.90	-.90	.38
140	110	-1.04	-1.04	.35
141	220	-.99	-.99	.27
142	270	-.97	-.97	.25
143	220	-.68	-.68	.15
144	150	-.90	-.90	.31
145	130	-.56	-.56	.50
146	210	-.92	-.92	.29
147	150	-.90	-.90	.36
148	190	-.94	-.94	.34
149	190	-.84	-.84	.24
150	160	-.85	-.85	.31
151	160	-.81	-.81	.57
152	230	-.69	-.69	.47
153	190	-.77	-.77	.46
154	170	-.85	-.85	.36
155	160	-.71	-.71	.34
156	60	-.96	-.96	.40
157	160	-.48	-.48	.22
201	190	-.72	-.72	.31
203	240	-.70	-.70	.33
204	210	-.82	-.82	.48
205	170	-.55	-.55	.52
206	230	-.53	-.53	.40
209	260	-.76	-.76	.29
212	250	-.62	-.62	.40
213	160	.50	-.31	.50
226	170	.45	-.29	.45
230	180	.51	-.29	.51
232	200	.44	-.31	.44
233	210	.60	-.29	.60
234	240	-.41	-.41	.36
235	260	-.84	-.84	.17
236	190	.34	-.30	.34
239	260	-.60	-.60	.28
246	170	-.34	-.34	.32
251	30	-.51	-.51	.30
252	20	-.53	-.53	.29
253	0	-.57	-.57	.34
255	250	-.70	-.70	.16
257	260	-.77	-.77	.11

TABLE 6A. PEAK LOADS FOR CONFIGURATION B : HELIOS TENSION STRUCTURE
LARGEST VALUES OF CLADDING LOAD REFERENCE PRESSURE = 1.0 PSF

* * 15 GREATEST PRESSURE COEFFICIENT MAGNITUDES * *

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK ---- PSF	POSITIVE PEAK ----
126	320	-1.60	-1.60	.36
125	10	-1.48	-1.48	.34
124	340	-1.36	-1.36	.34
116	20	-1.34	-1.34	.29
121	330	-1.29	-1.29	.25
122	10	-1.28	-1.28	.32
119	340	-1.28	-1.28	.22
113	0	-1.25	-1.25	.22
104	350	-1.25	-1.25	.38
115	30	-1.24	-1.24	.36
114	10	-1.22	-1.22	.31
130	350	-1.20	-1.20	.44
131	10	-1.19	-1.19	.24
132	0	-1.15	-1.15	.13
118	40	-1.13	-1.13	.32

TABLE 7. BASE SHEAR SUMMARY : HELIOS TENSION STRUCTURE
CONFIGURATION A REFERENCE PRESSURE 17.0 GUST FACTOR 2.25

WIND DIRECTION	X-SHEAR ALONG Z	X-SHEAR ALONG Y	% DIFF.	Y-SHEAR ALONG Z	Y-SHEAR ALONG X	% DIFF.	Z-SHEAR ALONG X	Z-SHEAR ALONG Y	% DIFF
0	-54.4	-46.3	13.5	0.0	0.0	0.0	124.7	108.4	11.7
10	-53.6	-46.8	11.3	1.0	2.7	4.5	130.5	114.0	11.9
20	-51.9	-46.8	8.5	5.3	7.4	5.7	138.1	125.4	9.1
30	-47.9	-44.0	6.4	11.9	14.4	6.6	139.4	130.5	6.3
40	-40.2	-37.7	4.2	19.3	21.6	6.3	125.1	123.0	1.5
50	-31.3	-30.0	2.3	28.2	27.6	1.6	101.8	105.5	2.6
60	-21.0	-21.4	.7	32.5	32.6	.1	75.1	84.7	6.9
70	-12.8	-13.8	1.7	34.7	35.3	1.6	52.6	64.2	8.3
80	-7.9	-8.5	1.0	34.3	34.0	.8	37.1	44.5	5.3
90	-4.5	-5.1	.9	35.0	33.8	3.4	24.9	31.6	4.8
100	1.4	-.0	2.4	36.7	35.8	2.4	18.5	27.2	6.2
110	10.8	8.4	3.9	36.9	37.1	.7	21.7	28.7	5.0
120	21.9	19.0	4.9	34.2	35.3	3.0	26.3	31.0	3.4
130	35.0	30.8	6.8	29.1	30.3	3.2	29.7	31.5	1.3
140	43.3	38.2	8.4	19.3	21.6	6.2	30.5	30.6	.0
150	49.6	43.1	10.7	10.9	14.8	10.5	12.2	13.8	1.1
160	56.0	48.3	12.8	6.3	10.4	11.1	-10.7	-7.4	2.4
170	59.3	50.7	14.2	2.3	5.1	7.7	-18.2	-17.0	.9
180	60.5	52.2	13.6	.0	.0	0.0	-18.4	-19.4	.7
190	59.3	50.7	14.2	-2.3	-5.1	7.7	-18.2	-17.0	.9
200	56.0	48.3	12.8	-6.3	-10.4	11.1	-10.7	-7.4	2.4
210	49.6	43.1	10.7	-10.9	-14.8	10.5	12.2	13.8	1.1
220	43.3	38.2	8.4	-19.3	-21.6	6.2	30.5	30.6	.0
230	35.0	30.8	6.8	-29.1	-30.3	3.2	29.7	31.5	1.3
240	21.9	19.0	4.9	-34.2	-35.3	3.0	26.3	31.0	3.4
250	10.8	8.4	3.9	-36.9	-37.1	.7	21.7	28.7	5.0
260	1.4	-.0	2.4	-36.7	-35.8	2.4	18.5	27.2	6.2
270	-4.5	-5.1	.9	-35.0	-33.8	3.4	24.9	31.6	4.8
280	-7.9	-8.5	1.0	-34.3	-34.0	.8	37.1	44.5	5.3
290	-12.8	-13.8	1.7	-34.7	-35.3	1.6	52.6	64.2	8.3
300	-21.0	-21.4	.7	-32.5	-32.6	.1	75.1	84.7	6.9
310	-31.3	-30.0	2.3	-28.2	-27.6	1.6	101.8	105.5	2.6
320	-40.2	-37.7	4.2	-19.3	-21.6	6.3	125.1	123.0	1.5
330	-47.9	-44.0	6.4	-11.9	-14.4	6.6	139.4	130.5	6.3
340	-51.9	-46.8	8.5	-5.3	-7.4	5.7	138.1	125.4	9.1
350	-53.6	-46.8	11.3	-1.0	-2.7	4.5	130.5	114.0	11.9

% DIFF. COLUMNS SHOW DIFFERENCES AS PERCENTAGES OF THE LARGEST SHEAR FOR THE PARTICULAR COORDINATE DIRECTION.

TABLE 7. BASE SHEAR SUMMARY : HELIOS TENSION STRUCTURE
CONFIGURATION B REFERENCE PRESSURE 17.0 GUST FACTOR 2.25

WIND DIRECTION	X-SHEAR ALONG Z	X-SHEAR ALONG Y	X-SHEAR % DIFF	Y-SHEAR ALONG Z	Y-SHEAR ALONG X	Y-SHEAR % DIFF.	Z-SHEAR ALONG X	Z-SHEAR ALONG Y	Z-SHEAR % DIFF.
0	-64.7	-54.9	15.1	0.0	0.0	0.0	259.3	251.3	3.1
10	-62.6	-54.0	13.2	1.4	2.7	3.6	259.8	246.7	5.1
20	-58.9	-52.2	10.3	4.9	6.2	3.4	254.5	239.3	5.8
30	-52.8	-47.4	8.3	10.1	12.1	5.4	240.6	228.1	4.8
40	-45.9	-41.2	7.3	14.9	17.0	5.6	218.2	210.4	3.0
50	-38.2	-34.4	5.8	19.0	20.1	2.8	190.1	187.2	1.1
60	-29.1	-26.3	4.3	23.5	24.1	1.5	154.6	155.3	.2
70	-20.4	-19.1	1.9	28.9	28.9	.0	115.3	117.4	.8
80	-12.9	-12.6	.3	32.4	32.2	.7	75.1	75.1	.0
90	-5.4	-6.1	1.1	35.0	34.1	2.5	39.1	40.0	.3
100	3.7	1.2	3.8	37.0	36.4	1.6	14.0	14.5	.2
110	14.7	10.7	6.1	37.0	36.8	.7	-2.7	-3.4	.2
120	25.1	20.6	6.9	33.8	33.8	.0	-10.1	-14.7	1.8
130	31.5	27.6	6.1	25.3	26.6	3.3	-3.4	-11.7	3.2
140	37.2	33.3	6.0	19.1	20.8	4.6	-4.8	-13.4	3.3
150	39.8	36.2	5.6	14.2	14.9	1.8	-10.2	-15.0	1.8
160	39.6	35.8	5.9	8.8	9.6	2.2	-10.5	-14.8	1.7
170	38.7	35.1	5.6	4.0	4.9	2.4	-12.1	-17.5	2.1
180	38.5	34.7	6.0	0.0	0.0	0.0	-11.4	-15.1	1.4
190	38.7	35.1	5.6	-4.0	-4.9	2.4	-12.1	-17.5	2.1
200	39.6	35.8	5.9	-8.8	-9.6	2.2	-10.5	-14.8	1.7
210	39.8	36.2	5.6	-14.2	-14.9	1.8	-10.2	-15.0	1.8
220	37.2	33.3	6.0	-19.1	-20.8	4.6	-4.8	-13.4	3.3
230	31.5	27.6	6.1	-25.3	-26.6	3.3	-3.4	-11.7	3.2
240	25.1	20.6	6.9	-33.8	-33.8	.0	-10.1	-14.7	1.8
250	14.7	10.7	6.1	-37.0	-36.8	.7	-2.7	-3.4	.2
260	3.7	1.2	3.8	-37.0	-36.4	1.6	14.0	14.5	.3
270	-5.4	-6.1	1.1	-35.0	-34.1	2.5	39.1	40.0	.3
280	-12.9	-12.6	.3	-32.4	-32.2	.7	75.1	75.1	.0
290	-20.4	-19.1	1.9	-28.9	-28.9	.0	115.3	117.4	.8
300	-29.1	-26.3	4.3	-23.5	-24.1	1.5	154.6	155.3	.2
310	-38.2	-34.4	5.8	-19.0	-20.1	2.8	190.1	187.2	1.1
320	-45.9	-41.2	7.3	-14.9	-17.0	5.6	218.2	210.4	3.0
330	-52.8	-47.4	8.3	-10.1	-12.1	5.4	240.6	228.1	4.8
340	-58.9	-52.2	10.3	-4.9	-6.2	3.4	254.5	239.3	5.8
350	-62.6	-54.0	13.2	-1.4	-2.7	3.6	259.8	246.7	5.1

% DIFF. COLUMNS SHOW DIFFERENCES AS PERCENTAGES OF THE LARGEST SHEAR FOR THE PARTICULAR COORDINATE DIRECTION.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 0 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	.3	0.0	87	10	4.0	0.0	124.7	0.0	0.
5.000	4.3	0.0	270	29	16.0	0.0	124.4	0.0	0.
10.000	14.0	0.0	628	51	22.3	0.0	120.0	0.0	0.
15.000	15.4	0.0	663	87	23.2	0.0	106.0	0.0	0.
20.000	16.2	0.0	647	128	25.0	0.0	90.6	0.0	0.
25.000	18.3	0.0	645	177	28.4	0.0	74.5	0.0	0.
30.000	18.8	0.0	651	230	28.8	0.0	56.2	0.0	0.
35.000	18.8	0.0	663	325	28.4	0.0	37.4	0.0	0.
40.000	17.5	0.0	651	369	26.9	0.0	18.6	0.0	0.
45.000	14.9	0.0	662	367	22.5	0.0	1.0	0.0	0.
50.000	9.2	0.0	655	305	14.0	0.0	-13.8	0.0	0.
55.000	2.9	0.0	641	223	4.5	0.0	-23.0	0.0	0.
60.000	-2.7	0.0	637	169	-4.2	0.0	-25.8	0.0	0.
65.000	-7.5	0.0	640	117	-11.8	0.0	-23.2	0.0	0.
70.000	-6.2	0.0	445	74	-13.9	0.0	-15.6	0.0	0.
75.000	-3.3	0.0	254	40	-12.9	0.0	-9.4	0.0	0.
80.000	-2.8	0.0	172	23	-16.5	0.0	-6.2	0.0	0.
85.000	-2.2	0.0	100	14	-21.7	0.0	-3.3	0.0	0.
90.000	-1.2	0.0	29	0	-40.3	0.0	-1.2	0.0	0.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 10 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-.0	-.1	87	10	-.2	-11.6	130.5	2.7	156.
5.000	3.8	-.4	270	29	14.1	-12.0	130.5	2.8	153.
10.000	13.2	-.3	628	51	21.1	-6.7	126.7	3.1	219.
15.000	15.1	-.2	663	87	22.7	-2.8	113.5	3.5	339.
20.000	16.3	-.2	647	128	25.1	-1.8	98.4	3.7	411.
25.000	18.5	-.5	645	177	28.6	-2.6	82.1	4.0	460.
30.000	19.4	-.3	651	230	29.7	-1.4	63.7	4.4	511.
35.000	19.9	-.2	663	325	30.0	-.5	44.3	4.8	545.
40.000	18.2	-.0	651	369	28.0	-.1	24.4	4.9	563.
45.000	15.5	.8	662	367	23.4	2.3	6.2	5.0	536.
50.000	9.6	1.4	655	305	14.6	4.7	-9.3	4.1	501.
55.000	3.3	.9	641	223	5.2	4.3	-18.9	2.7	454.
60.000	-2.1	.8	637	169	-3.3	4.7	-22.2	1.7	375.
65.000	-7.0	.6	640	117	-11.0	4.9	-20.1	1.0	283.
70.000	-5.8	.3	445	74	-13.0	4.2	-13.0	.4	189.
75.000	-2.9	.1	254	40	-11.4	3.0	-7.3	.1	111.
80.000	-2.3	-.0	172	23	-13.2	-.4	-4.4	-.1	73.
85.000	-1.5	-.0	100	14	-14.8	-3.2	-2.1	-.0	44.
90.000	-.6	.0	29	0	-22.3	3.0	-.6	.0	22.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 20 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							138.1	7.4	648.
	-.4	-.1	87	10	-5.0	-13.4			
5.000							138.5	7.6	602.
	2.9	-.3	270	29	10.8	-11.6			
10.000							135.6	7.9	651.
	11.7	-.4	628	51	18.6	-7.7			
15.000							123.9	8.3	785.
	14.3	-.4	663	87	21.6	-4.5			
20.000							109.6	8.7	878.
	16.2	-.4	647	128	25.0	-3.1			
25.000							93.4	9.1	956.
	19.0	-.6	645	177	29.5	-3.6			
30.000							74.4	9.7	1037.
	21.0	-.6	651	230	32.2	-2.6			
35.000							53.4	10.3	1108.
	21.8	-.3	663	325	32.9	-1.0			
40.000							31.6	10.6	1147.
	18.8	.1	651	369	28.8	.3			
45.000							12.8	10.5	1096.
	15.7	1.8	662	367	23.8	5.0			
50.000							-2.9	8.7	1026.
	9.9	3.0	655	305	15.2	9.8			
55.000							-12.9	5.7	921.
	4.1	2.0	641	223	6.5	9.0			
60.000							-17.0	3.7	762.
	-1.0	1.6	637	169	-1.5	9.4			
65.000							-16.0	2.1	579.
	-5.5	1.2	640	117	-8.6	9.9			
70.000							-10.5	.9	386.
	-4.5	.7	445	74	-10.2	9.3			
75.000							-6.0	.2	220.
	-2.2	.3	254	40	-8.7	7.4			
80.000							-3.8	-.1	127.
	-1.8	.0	172	23	-10.4	.6			
85.000							-2.0	-.1	68.
	-1.3	-.1	100	14	-13.2	-4.8			
90.000							-.7	-.0	29.
	-.7	.0	29	0	-23.7	4.1			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 30 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							139.4	14.4	1269.
	-.7	-.1	87	10	-7.5	-14.0			
5.000							140.0	14.5	1217.
	2.3	-.3	270	29	8.6	-10.3			
10.000							137.7	14.8	1266.
	10.4	-.4	628	51	16.5	-8.3			
15.000							127.3	15.3	1423.
	13.2	-.4	663	87	19.9	-4.9			
20.000							114.1	15.7	1548.
	15.2	-.5	647	128	23.5	-4.0			
25.000							98.9	16.2	1653.
	18.7	-.9	645	177	29.0	-4.8			
30.000							80.2	17.0	1750.
	21.6	-.8	651	230	33.2	-3.4			
35.000							58.6	17.8	1830.
	22.6	-.2	663	325	34.1	-.6			
40.000							36.0	18.0	1875.
	18.3	1.0	651	369	28.1	2.8			
45.000							17.7	17.0	1801.
	15.2	3.3	662	367	22.9	9.0			
50.000							2.5	13.7	1696.
	9.9	4.5	655	305	15.1	14.8			
55.000							-7.4	9.2	1536.
	4.8	3.1	641	223	7.5	13.8			
60.000							-12.2	6.1	1293.
	.2	2.5	637	169	.2	14.6			
65.000							-12.4	3.6	1008.
	-4.0	1.9	640	117	-6.3	16.0			
70.000							-8.3	1.8	696.
	-3.4	1.2	445	74	-7.7	15.8			
75.000							-4.9	.6	416.
	-1.5	.5	254	40	-6.1	13.4			
80.000							-3.4	.1	246.
	-1.4	.1	172	23	-8.3	4.3			
85.000							-2.0	-.0	129.
	-1.3	-.0	100	14	-12.5	-2.8			
90.000							-.7	.0	49.
	-.7	.0	29	0	-24.6	.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 40 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							125.1	21.6	1963.
	-.9	-.1	87	10	-9.9	-12.7			
5.000							126.0	21.8	1914.
	2.1	-.2	270	29	7.8	-7.5			
10.000							123.9	22.0	1956.
	8.6	-.4	628	51	13.6	-7.3			
15.000							115.3	22.4	2088.
	11.1	-.4	663	87	16.7	-4.5			
20.000							104.3	22.7	2199.
	12.7	-.5	647	128	19.7	-3.9			
25.000							91.5	23.2	2290.
	16.5	-.8	645	177	25.5	-4.3			
30.000							75.1	24.0	2363.
	19.8	-.6	651	230	30.4	-2.7			
35.000							55.2	24.6	2420.
	21.1	.1	663	325	31.8	.4			
40.000							34.2	24.5	2429.
	16.1	2.2	651	369	24.8	6.0			
45.000							18.1	22.3	2325.
	13.2	4.8	662	367	20.0	13.0			
50.000							4.8	17.5	2175.
	8.9	5.7	655	305	13.5	18.6			
55.000							-4.0	11.8	1952.
	4.8	3.9	641	223	7.5	17.7			
60.000							-8.8	7.8	1644.
	.8	3.1	637	169	1.2	18.5			
65.000							-9.6	4.7	1291.
	-3.0	2.3	640	117	-4.6	19.9			
70.000							-6.7	2.4	904.
	-2.5	1.5	445	74	-5.5	20.3			
75.000							-4.2	.9	551.
	-.9	.8	254	40	-3.7	18.5			
80.000							-3.3	.1	327.
	-1.2	.2	172	23	-6.9	7.2			
85.000							-2.1	-.0	171.
	-1.3	-.0	100	14	-12.6	-1.4			
90.000							-.8	-.0	62.
	-.8	-.0	29	0	-28.1	-2.4			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 50 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							101.8	27.6	2635.
	-.8	-.1	87	10	-9.4	-10.2			
5.000							102.6	27.7	2581.
	1.4	-.1	270	29	5.2	-3.2			
10.000							101.2	27.8	2588.
	6.0	-.2	628	51	9.5	-3.5			
15.000							95.2	28.0	2652.
	8.4	-.2	663	87	12.6	-2.8			
20.000							86.9	28.2	2719.
	10.0	-.3	647	128	15.5	-2.4			
25.000							76.8	28.5	2779.
	13.4	-.5	645	177	20.7	-2.9			
30.000							63.5	29.1	2819.
	16.8	-.2	651	230	25.8	-.9			
35.000							46.7	29.3	2826.
	18.1	.6	663	325	27.3	2.0			
40.000							28.6	28.6	2775.
	12.5	3.4	651	369	19.2	9.2			
45.000							16.0	25.2	2631.
	9.9	5.8	662	367	14.9	15.7			
50.000							6.2	19.4	2442.
	6.8	6.2	655	305	10.4	20.3			
55.000							-.6	13.2	2176.
	4.3	4.4	641	223	6.7	19.8			
60.000							-4.9	8.8	1833.
	1.4	3.4	637	169	2.1	20.4			
65.000							-6.3	5.4	1448.
	-1.5	2.5	640	117	-2.3	21.7			
70.000							-4.8	2.8	1030.
	-1.2	1.7	445	74	-2.8	23.5			
75.000							-3.6	1.1	638.
	-.4	.9	254	40	-1.4	22.5			
80.000							-3.2	.2	372.
	-.9	.2	172	23	-5.4	9.0			
85.000							-2.3	-.0	187.
	-1.3	-.0	100	14	-13.1	-1.4			
90.000							-1.0	.0	65.
	-1.0	-.0	29	0	-34.1	-4.5			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 60 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							75.1	32.6	3142.
	-.5	-.1	87	10	-6.0	-8.3			
5.000							75.6	32.7	3059.
	.8	-.0	270	29	3.1	-.3			
10.000							74.8	32.7	3025.
	4.0	-.0	628	51	6.3	-.7			
15.000							70.8	32.7	3036.
	6.1	-.1	663	87	9.1	-1.0			
20.000							64.8	32.8	3058.
	7.4	.1	647	128	11.5	.4			
25.000							57.3	32.7	3072.
	10.3	.1	645	177	16.0	.6			
30.000							47.0	32.6	3070.
	13.1	.6	651	230	20.1	2.6			
35.000							33.9	32.0	3010.
	13.6	1.8	663	325	20.5	5.4			
40.000							20.3	30.3	2875.
	7.8	4.9	651	369	12.0	13.2			
45.000							12.5	25.4	2665.
	5.9	6.6	662	367	8.8	18.0			
50.000							6.7	18.8	2425.
	4.5	6.1	655	305	6.9	19.9			
55.000							2.1	12.7	2131.
	3.4	4.2	641	223	5.3	18.7			
60.000							-1.3	8.6	1782.
	1.6	3.2	637	169	2.5	18.8			
65.000							-2.9	5.4	1400.
	-.2	2.5	640	117	-.3	21.3			
70.000							-2.7	2.9	994.
	.0	1.9	445	74	.1	25.1			
75.000							-2.8	1.0	615.
	.2	1.0	254	40	.9	23.9			
80.000							-3.0	.1	346.
	-.5	.2	172	23	-3.1	7.0			
85.000							-2.5	-.1	170.
	-1.3	-.1	100	14	-12.8	-6.2			
90.000							-1.2	-.0	58.
	-1.2	-.0	29	0	-40.8	-1.1			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 70 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							52.6	35.3	3360.
	-.2	-.1	87	10	-2.5	-6.7			
5.000							52.8	35.4	3259.
	.6	.1	270	29	2.2	2.2			
10.000							52.2	35.3	3188.
	2.5	.1	628	51	4.0	2.4			
15.000							49.7	35.2	3140.
	4.1	.1	663	87	6.2	1.0			
20.000							45.6	35.1	3106.
	5.0	.4	647	128	7.7	3.0			
25.000							40.6	34.7	3068.
	7.1	.7	645	177	11.0	4.0			
30.000							33.5	34.0	3020.
	9.0	1.4	651	230	13.9	6.1			
35.000							24.5	32.6	2912.
	9.3	2.8	663	325	14.1	8.6			
40.000							15.2	29.8	2736.
	4.0	5.9	651	369	6.1	16.1			
45.000							11.2	23.9	2465.
	2.8	7.0	662	367	4.2	19.0			
50.000							8.4	16.9	2107.
	2.9	5.7	655	305	4.4	18.7			
55.000							5.6	11.2	1695.
	3.0	3.7	641	223	4.7	16.8			
60.000							2.6	7.5	1367.
	2.3	2.8	637	169	3.7	16.4			
65.000							.3	4.7	1225.
	1.7	2.1	640	117	2.6	18.2			
70.000							-1.4	2.6	875.
	1.2	1.6	445	74	2.6	22.3			
75.000							-2.6	.9	551.
	.6	.9	254	40	2.4	21.7			
80.000							-3.2	.0	316.
	-.4	.1	172	23	-2.3	5.7			
85.000							-2.8	-.1	162.
	-1.4	-.1	100	14	-14.2	-7.0			
90.000							-1.4	.0	59.
	-1.4	.0	29	0	-47.2	1.6			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 80 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							37.1	34.0	3378.
	-.4	-.0	87	10	-4.0	-3.4			
5.000							37.5	34.0	3251.
	.4	.2	270	29	1.4	6.1			
10.000							37.1	33.8	3127.
	1.9	.4	628	51	3.0	7.0			
15.000							35.2	33.5	2998.
	3.0	.4	663	87	4.5	4.0			
20.000							32.2	33.1	2897.
	3.6	.6	647	128	5.6	4.9			
25.000							28.6	32.5	2808.
	4.6	1.1	645	177	7.1	6.0			
30.000							24.0	31.4	2717.
	5.8	1.9	651	230	8.9	8.2			
35.000							18.2	29.5	2588.
	5.8	3.2	663	325	8.7	9.9			
40.000							12.4	26.3	2408.
	1.2	5.9	651	369	1.8	16.0			
45.000							11.2	20.4	2117.
	.9	6.4	662	367	1.4	17.3			
50.000							10.3	14.1	1840.
	2.1	4.8	655	305	3.3	15.9			
55.000							8.1	9.2	1582.
	3.0	3.0	641	223	4.8	13.6			
60.000							5.1	6.2	1312.
	3.1	2.2	637	169	4.8	12.9			
65.000							2.0	4.0	1031.
	3.2	1.8	640	117	5.0	15.5			
70.000							-1.2	2.2	728.
	1.3	1.4	445	74	3.0	18.9			
75.000							-2.5	.8	434.
	-.1	.7	254	40	-.4	17.6			
80.000							-2.4	.1	222.
	-.6	.1	172	23	-3.7	6.3			
85.000							-1.8	-.0	91.
	-1.0	-.0	100	14	-9.9	-2.9			
90.000							-.8	-.0	26.
	-.8	-.0	29	0	-27.2	-2.0			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 90 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							24.9	33.8	3627.
	-.5	.1	87	10	-6.0	7.4			
5.000							25.4	33.7	3527.
	.3	.4	270	29	1.2	13.2			
10.000							25.1	33.3	3376.
	1.9	.6	628	51	3.1	12.1			
15.000							23.2	32.7	3135.
	2.7	.7	663	87	4.0	7.9			
20.000							20.5	32.0	2926.
	2.9	1.1	647	128	4.5	8.7			
25.000							17.6	30.9	2743.
	3.1	1.6	645	177	4.9	9.1			
30.000							14.5	29.3	2571.
	3.9	2.5	651	230	6.0	10.9			
35.000							10.6	26.8	2389.
	3.3	3.9	663	325	4.9	12.1			
40.000							7.3	22.8	2202.
	-.5	5.6	651	369	-.7	15.2			
45.000							7.8	17.2	1924.
	.1	5.5	662	367	.1	14.9			
50.000							7.8	11.7	1661.
	1.9	4.0	655	305	2.9	13.1			
55.000							5.9	7.7	1425.
	2.8	2.5	641	223	4.3	11.2			
60.000							3.1	5.3	1198.
	2.8	1.7	637	169	4.4	10.3			
65.000							.3	3.5	968.
	2.8	1.5	640	117	4.4	12.5			
70.000							-2.6	2.0	719.
	.9	1.2	445	74	2.1	16.0			
75.000							-3.5	.9	463.
	-.5	.6	254	40	-2.1	15.5			
80.000							-3.0	.2	268.
	-.9	.2	172	23	-5.3	8.6			
85.000							-2.1	.0	130.
	-1.2	.0	100	14	-11.8	2.6			
90.000							-.9	.0	41.
	-.9	-.0	29	0	-30.8	-11.0			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 100 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							18.5	35.8	3837.
	-1.7	.2	87	10	-19.3	20.2			
5.000							20.2	35.6	3729.
	-1.0	.6	270	29	-3.6	18.8			
10.000							21.2	35.0	3548.
	.3	.8	628	51	.5	15.1			
15.000							20.8	34.3	3216.
	1.3	1.1	663	87	2.0	12.2			
20.000							19.5	33.2	2908.
	1.7	1.7	647	128	2.6	13.3			
25.000							17.9	31.5	2624.
	1.9	2.4	645	177	3.0	13.3			
30.000							15.9	29.1	2358.
	2.9	3.4	651	230	4.4	14.8			
35.000							13.1	25.7	2102.
	2.5	5.1	663	325	3.8	15.8			
40.000							10.5	20.6	1878.
	.0	6.1	651	369	.0	16.5			
45.000							10.5	14.5	1597.
	1.4	5.1	662	367	2.2	14.0			
50.000							9.1	9.4	1336.
	3.6	3.3	655	305	5.4	10.9			
55.000							5.5	6.0	1116.
	3.5	2.0	641	223	5.5	9.1			
60.000							2.0	4.0	931.
	2.9	1.3	637	169	4.6	7.7			
65.000							-.9	2.7	757.
	2.3	1.1	640	117	3.7	9.0			
70.000							-3.3	1.7	579.
	.5	.9	445	74	1.1	12.4			
75.000							-3.8	.7	391.
	-.7	.5	254	40	-2.6	12.9			
80.000							-3.1	.2	238.
	-1.0	.2	172	23	-5.6	7.7			
85.000							-2.1	.0	125.
	-1.2	.0	100	14	-12.0	3.1			
90.000							-.9	-.0	43.
	-.9	-.0	29	0	-32.6	-12.6			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS ; HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 110 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							21.7	37.1	3800.
	-2.2	.2	87	10	-25.1	22.1			
5.000							23.8	36.9	3716.
	-2.4	.6	270	29	-9.0	18.9			
10.000							26.3	36.3	3536.
	-2.9	.9	628	51	-4.6	17.2			
15.000							29.1	35.5	3163.
	-1.4	1.5	663	87	-2.0	16.8			
20.000							30.5	34.0	2790.
	-.1	2.3	647	128	-.2	17.6			
25.000							30.6	31.8	2432.
	1.0	3.1	645	177	1.6	17.5			
30.000							29.6	28.7	2086.
	2.8	4.3	651	230	4.3	18.6			
35.000							26.8	24.4	1768.
	3.2	6.2	663	325	4.9	18.9			
40.000							23.5	18.2	1506.
	2.0	6.6	651	369	3.1	17.9			
45.000							21.5	11.6	1224.
	4.4	4.9	662	367	6.6	13.4			
50.000							17.1	6.7	967.
	6.8	2.7	655	305	10.4	8.8			
55.000							10.3	4.0	757.
	5.9	1.5	641	223	9.2	6.6			
60.000							4.4	2.6	606.
	4.3	.8	637	169	6.8	4.9			
65.000							.0	1.7	482.
	2.9	.7	640	117	4.5	5.8			
70.000							-2.9	1.1	368.
	.5	.6	445	74	1.1	8.1			
75.000							-3.3	.5	251.
	-.8	.3	254	40	-3.0	8.2			
80.000							-2.6	.1	155.
	-.9	.1	172	23	-5.2	4.9			
85.000							-1.7	.0	87.
	-1.0	.0	100	14	-9.6	1.5			
90.000							-.7	.0	31.
	-.7	-.0	29	0	-25.4	-10.1			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 120 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							26.3	35.3	3360.
5.000	-2.3	.2	87	10	-26.2	22.9	28.5	35.1	3486.
10.000	-3.9	.6	270	29	-14.4	19.4	32.4	34.5	3283.
15.000	-6.7	1.0	628	51	-10.7	19.7	39.2	33.5	2880.
20.000	-5.0	1.7	663	87	-7.5	19.8	44.2	31.8	2472.
25.000	-2.5	2.5	647	128	-3.9	19.6	46.7	29.3	2089.
30.000	.0	3.4	645	177	.0	19.5	46.7	25.8	1727.
35.000	2.9	4.7	651	230	4.5	20.3	43.8	21.2	1401.
40.000	4.6	6.5	663	325	7.0	20.0	39.2	14.6	1145.
45.000	4.7	6.2	651	369	7.2	16.8	34.5	8.5	892.
50.000	7.6	4.0	662	367	11.5	11.0	26.8	4.4	670.
55.000	10.0	1.9	655	305	15.3	6.1	16.8	2.6	494.
60.000	8.5	1.0	641	223	13.3	4.4	8.3	1.6	377.
65.000	6.2	.5	637	169	9.8	3.0	2.1	1.1	289.
70.000	4.1	.5	640	117	6.4	4.0	-2.1	.6	212.
75.000	1.1	.4	445	74	2.6	5.2	-3.2	.2	142.
80.000	-.6	.2	254	40	-2.4	4.4	-2.6	.0	88.
85.000	-.8	.0	172	23	-4.8	1.9	-1.8	-.0	55.
90.000	-1.0	-.0	100	14	-9.7	-.8	-.8	.0	23.
94.480	-.8	-.0	29	0	-27.9	-6.5	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 130 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							29.7	30.3	2966.
	-2.3	.2	87	10	-26.7	21.8			
5.000							32.0	30.1	2906.
	-5.0	.5	270	29	-18.4	18.6			
10.000							37.0	29.5	2706.
	-9.8	1.1	628	51	-15.6	20.7			
15.000							46.8	28.5	2296.
	-8.4	1.9	663	87	-12.6	21.4			
20.000							55.1	26.6	1879.
	-5.5	2.6	647	128	-8.4	20.4			
25.000							60.6	24.0	1495.
	-2.0	3.6	645	177	-3.1	20.3			
30.000							62.6	20.4	1139.
	1.8	4.5	651	230	2.8	19.7			
35.000							60.8	15.9	846.
	5.3	6.1	663	325	7.9	18.9			
40.000							55.6	9.7	641.
	7.0	5.0	651	369	10.7	13.5			
45.000							48.6	4.7	431.
	10.2	2.7	662	367	15.4	7.5			
50.000							38.4	2.0	271.
	12.2	1.0	655	305	18.7	3.2			
55.000							26.1	1.0	174.
	10.9	.4	641	223	17.0	1.9			
60.000							15.3	.6	118.
	8.5	.1	637	169	13.4	.8			
65.000							6.8	.5	80.
	6.2	.2	640	117	9.7	1.7			
70.000							.6	.3	44.
	2.5	.2	445	74	5.6	2.4			
75.000							-1.9	.1	8.
	-.2	.1	254	40	-.7	2.1			
80.000							-1.8	.0	-17.
	-.5	.0	172	23	-3.0	.7			
85.000							-1.2	-.0	-18.
	-.6	-.0	100	14	-6.5	-1.2			
90.000							-.6	.0	-8.
	-.6	-.0	29	0	-20.7	-3.8			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 140 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							30.5	21.6	2151.
	-2.7	.2	87	10	-30.7	19.7			
5.000							33.2	21.4	2092.
	-5.6	.5	270	29	-20.7	15.8			
10.000							38.8	20.9	1916.
	-11.6	.9	628	51	-18.5	17.9			
15.000							50.4	20.0	1519.
	-10.5	1.7	663	87	-15.9	19.5			
20.000							60.9	18.3	1110.
	-7.6	2.4	647	128	-11.7	18.9			
25.000							68.5	15.9	733.
	-3.7	3.2	645	177	-5.8	18.1			
30.000							72.2	12.7	384.
	.5	4.0	651	230	.8	17.3			
35.000							71.7	8.7	123.
	5.4	5.1	663	325	8.1	15.6			
40.000							66.3	3.6	-28.
	9.0	3.2	651	369	13.8	8.7			
45.000							57.3	.4	-162.
	12.0	1.2	662	367	18.2	3.4			
50.000							45.3	-.8	-229.
	13.3	.1	655	305	20.3	.3			
55.000							32.1	-.9	-226.
	11.9	-.2	641	223	18.6	-.9			
60.000							20.1	-.7	-198.
	9.7	-.3	637	169	15.2	-2.0			
65.000							10.4	-.4	-162.
	7.5	-.2	640	117	11.8	-1.9			
70.000							2.9	-.1	-132.
	3.6	-.1	445	74	8.1	-1.2			
75.000							-.7	-.1	-114.
	.5	-.0	254	40	2.0	-.5			
80.000							-1.2	-.0	-103.
	-.1	-.0	172	23	-.6	-.7			
85.000							-1.1	-.0	-76.
	-.5	-.0	100	14	-5.0	-2.0			
90.000							-.6	.0	-33.
	-.6	-.0	29	0	-22.0	-2.3			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 150 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							12.2	14.8	1474.
	-3.1	.1	87	10	-36.1	13.9			
5.000							15.4	14.7	1425.
	-6.5	.3	270	29	-24.1	10.4			
10.000							21.9	14.3	1298.
	-14.4	.6	628	51	-22.9	12.6			
15.000							36.3	13.7	980.
	-13.6	1.3	663	87	-20.4	15.2			
20.000							49.8	12.4	643.
	-10.4	1.9	647	128	-16.1	15.1			
25.000							60.3	10.5	326.
	-5.9	2.5	645	177	-9.2	14.0			
30.000							66.2	8.0	32.
	-1.7	3.1	651	230	-2.5	13.6			
35.000							67.9	4.9	-187.
	3.8	4.1	663	325	5.8	12.5			
40.000							64.0	.8	-308.
	8.2	2.2	651	369	12.6	6.0			
45.000							55.8	-1.4	-423.
	10.9	.6	662	367	16.4	1.5			
50.000							44.9	-2.0	-467.
	11.6	-.3	655	305	17.8	-1.0			
55.000							33.3	-1.7	-435.
	10.9	-.5	641	223	17.0	-2.1			
60.000							22.4	-1.2	-383.
	9.5	-.5	637	169	14.9	-2.8			
65.000							12.9	-.7	-325.
	8.1	-.4	640	117	12.6	-3.2			
70.000							4.8	-.3	-262.
	4.3	-.2	445	74	9.8	-2.3			
75.000							.5	-.2	-210.
	1.1	-.1	254	40	4.5	-1.3			
80.000							-.7	-.1	-180.
	.3	-.1	172	23	1.7	-2.7			
85.000							-1.0	-.1	-132.
	-.3	-.1	100	14	-3.4	-4.9			
90.000							-.6	.0	-56.
	-.6	.0	29	0	-21.2	.3			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 160 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-10.7	10.4	999.
	-3.6	.1	87	10	-41.9	12.1			
5.000							-7.0	10.3	990.
	-7.8	.2	270	29	-28.8	6.6			
10.000							.8	10.1	930.
	-18.0	.3	628	51	-28.6	6.8			
15.000							18.8	9.8	715.
	-17.2	.9	663	87	-25.9	10.1			
20.000							36.0	8.9	477.
	-13.7	1.4	647	128	-21.1	10.7			
25.000							49.6	7.5	246.
	-8.4	1.8	645	177	-13.1	10.4			
30.000							58.1	5.7	21.
	-3.6	2.3	651	230	-5.5	9.9			
35.000							61.6	3.4	-150.
	2.5	3.1	663	325	3.8	9.4			
40.000							59.1	.3	-254.
	6.9	1.8	651	369	10.7	4.8			
45.000							52.2	-1.4	-392.
	9.2	.5	662	367	13.8	1.3			
50.000							43.0	-1.9	-466.
	9.7	-.3	655	305	14.9	-1.0			
55.000							33.3	-1.6	-456.
	9.7	-.4	641	223	15.1	-1.9			
60.000							23.6	-1.2	-417.
	9.0	-.4	637	169	14.2	-2.6			
65.000							14.6	-.7	-367.
	8.5	-.4	640	117	13.3	-3.4			
70.000							6.1	-.3	-304.
	5.0	-.2	445	74	11.2	-2.2			
75.000							1.1	-.2	-251.
	1.5	-.0	254	40	5.9	-.8			
80.000							-.4	-.1	-227.
	.5	-.1	172	23	2.8	-3.0			
85.000							-.9	-.1	-174.
	-.2	-.1	100	14	-2.5	-5.8			
90.000							-.6	.0	-75.
	-.6	.0	29	0	-21.6	1.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 170 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-3.9	.1	87	10	-44.8	7.2	-18.2	5.1	416.
5.000	-8.7	.1	270	29	-32.2	2.7	-14.3	5.1	438.
10.000	-19.8	.2	628	51	-31.6	3.0	-5.6	5.0	424.
15.000	-18.9	.5	663	87	-28.4	5.2	14.2	4.8	319.
20.000	-14.8	.7	647	128	-22.8	5.3	33.1	4.4	194.
25.000	-8.9	.9	645	177	-13.9	5.1	47.9	3.7	76.
30.000	-3.7	1.2	651	230	-5.6	5.1	56.8	2.8	-39.
35.000	2.8	1.6	663	325	4.2	4.9	60.5	1.6	-129.
40.000	7.0	1.0	651	369	10.8	2.7	57.7	.0	-192.
45.000	8.8	.3	662	367	13.3	.8	50.7	-1.0	-300.
50.000	9.3	-.2	655	305	14.2	-.6	41.8	-1.3	-363.
55.000	9.2	-.3	641	223	14.3	-1.5	32.6	-1.1	-362.
60.000	8.6	-.3	637	169	13.4	-1.9	23.4	-.8	-339.
65.000	8.1	-.2	640	117	12.7	-2.1	14.8	-.5	-308.
70.000	5.0	-.1	445	74	11.3	-1.1	6.7	-.2	-269.
75.000	1.8	.0	254	40	7.1	.1	1.6	-.1	-238.
80.000	.7	-.1	172	23	3.8	-3.0	-.2	-.2	-224.
85.000	-.1	-.1	100	14	-1.4	-6.2	-.8	-.1	-173.
90.000	-.7	.0	29	0	-23.4	2.2	-.7	.0	-76.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 180 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-18.4	0.0	0.
	-3.7	0.0	87	10	-42.2	0.0			
5.000							-14.7	0.0	0.
	-9.1	0.0	270	29	-33.6	0.0			
10.000							-5.6	0.0	0.
	-21.1	0.0	628	51	-33.6	0.0			
15.000							15.5	0.0	0.
	-19.8	0.0	663	87	-29.9	0.0			
20.000							35.3	0.0	0.
	-15.5	0.0	647	128	-23.9	0.0			
25.000							50.8	0.0	0.
	-9.3	0.0	645	177	-14.4	0.0			
30.000							60.1	0.0	0.
	-3.5	0.0	651	230	-5.4	0.0			
35.000							63.6	0.0	0.
	3.2	0.0	663	325	4.9	0.0			
40.000							60.4	0.0	0.
	7.6	0.0	651	369	11.7	0.0			
45.000							52.7	0.0	0.
	9.2	0.0	662	367	13.9	0.0			
50.000							43.6	0.0	0.
	9.3	0.0	655	305	14.2	0.0			
55.000							34.3	0.0	0.
	9.1	0.0	641	223	14.2	0.0			
60.000							25.2	0.0	0.
	8.6	0.0	637	169	13.5	0.0			
65.000							16.5	0.0	0.
	8.4	0.0	640	117	13.1	0.0			
70.000							8.2	0.0	0.
	5.4	0.0	445	74	12.2	0.0			
75.000							2.7	0.0	0.
	2.2	0.0	254	40	8.6	0.0			
80.000							.6	0.0	0.
	1.1	0.0	172	23	6.1	0.0			
85.000							-.5	0.0	0.
	.2	0.0	100	14	1.5	0.0			
90.000							-.6	0.0	0.
	-.6	0.0	29	0	-22.5	0.0			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 190 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-3.9	-.1	87	10	-44.8	-7.2	-18.2	-5.1	-416.
5.000	-8.7	-.1	270	29	-32.2	-2.7	-14.3	-5.1	-438.
10.000	-19.8	-.2	628	51	-31.6	-3.0	-5.6	-5.0	-424.
15.000	-18.9	-.5	663	87	-28.4	-5.2	14.2	-4.8	-319.
20.000	-14.8	-.7	647	128	-22.8	-5.3	33.1	-4.4	-194.
25.000	-8.9	-.9	645	177	-13.9	-5.1	47.9	-3.7	-76.
30.000	-3.7	-1.2	651	230	-5.6	-5.1	56.8	-2.8	39.
35.000	2.8	-1.6	663	325	4.2	-4.9	60.5	-1.6	129.
40.000	7.0	-1.0	651	369	10.8	-2.7	57.7	-.0	192.
45.000	8.8	-.3	662	367	13.3	-.8	50.7	1.0	300.
50.000	9.3	.2	655	305	14.2	.6	41.8	1.3	363.
55.000	9.2	.3	641	223	14.3	1.5	32.6	1.1	362.
60.000	8.6	.3	637	169	13.4	1.9	23.4	.8	339.
65.000	8.1	.2	640	117	12.7	2.1	14.8	.5	308.
70.000	5.0	.1	445	74	11.3	1.1	6.7	.2	269.
75.000	1.8	-.0	254	40	7.1	-.1	1.6	.1	238.
80.000	.7	.1	172	23	3.8	3.0	-.2	.2	224.
85.000	-.1	.1	100	14	-1.4	6.2	-.8	.1	173.
90.000	-.7	-.0	29	0	-23.4	-2.2	-.7	-.0	76.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 200 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-10.7	-10.4	-999.
	-3.6	-.1	87	10	-41.9	-12.1			
5.000							-7.0	-10.3	-990.
	-7.8	-.2	270	29	-28.8	-6.6			
10.000							.8	-10.1	-930.
	-18.0	-.3	628	51	-28.6	-6.8			
15.000							18.8	-9.8	-715.
	-17.2	-.9	663	87	-25.9	-10.1			
20.000							36.0	-8.9	-477.
	-13.7	-1.4	647	128	-21.1	-10.7			
25.000							49.6	-7.5	-246.
	-8.4	-1.8	645	177	-13.1	-10.4			
30.000							58.1	-5.7	-21.
	-3.6	-2.3	651	230	-5.5	-9.9			
35.000							61.6	-3.4	150.
	2.5	-3.1	663	325	3.8	-9.4			
40.000							59.1	-.3	254.
	6.9	-1.8	651	369	10.7	-4.8			
45.000							52.2	1.4	392.
	9.2	-.5	662	367	13.8	-1.3			
50.000							43.0	1.9	466.
	9.7	.3	655	305	14.9	1.0			
55.000							33.3	1.6	456.
	9.7	.4	641	223	15.1	1.9			
60.000							23.6	1.2	417.
	9.0	.4	637	169	14.2	2.6			
65.000							14.6	.7	367.
	8.5	.4	640	117	13.3	3.4			
70.000							6.1	.3	304.
	5.0	.2	445	74	11.2	2.2			
75.000							1.1	.2	251.
	1.5	.0	254	40	5.9	.8			
80.000							-.4	.1	227.
	.5	.1	172	23	2.8	3.0			
85.000							-.9	.1	174.
	-.2	.1	100	14	-2.5	5.8			
90.000							-.6	-.0	75.
	-.6	-.0	29	0	-21.6	-1.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 210 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							12.2	-14.8	-1474.
	-3.1	-.1	87	10	-36.1	-13.9			
5.000							15.4	-14.7	-1425.
	-6.5	-.3	270	29	-24.1	-10.4			
10.000							21.9	-14.3	-1298.
	-14.4	-.6	628	51	-22.9	-12.6			
15.000							36.3	-13.7	-980.
	-13.6	-1.3	663	87	-20.4	-15.2			
20.000							49.8	-12.4	-643.
	-10.4	-1.9	647	128	-16.1	-15.1			
25.000							60.3	-10.5	-326.
	-5.9	-2.5	645	177	-9.2	-14.0			
30.000							66.2	-8.0	-32.
	-1.7	-3.1	651	230	-2.5	-13.6			
35.000							67.9	-4.9	187.
	3.8	-4.1	663	325	5.8	-12.5			
40.000							64.0	-.8	308.
	8.2	-2.2	651	369	12.6	-6.0			
45.000							55.8	1.4	423.
	10.9	-.6	662	367	16.4	-1.5			
50.000							44.9	2.9	467.
	11.6	.3	655	305	17.8	1.0			
55.000							33.3	1.7	435.
	10.9	.5	641	223	17.0	2.1			
60.000							22.4	1.2	303.
	9.5	.5	637	169	14.9	2.8			
65.000							12.9	.7	325.
	8.1	.4	640	117	12.6	3.2			
70.000							4.8	.3	262.
	4.3	.2	445	74	9.8	2.3			
75.000							.5	.2	210.
	1.1	.1	254	40	4.5	1.3			
80.000							-.7	.1	180.
	.3	.1	172	23	1.7	2.7			
85.000							-1.0	.1	132.
	-.3	.1	100	14	-3.4	4.9			
90.000							-.6	-.0	56.
	-.6	-.0	29	0	-21.2	-.3			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 220 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							30.5	-21.6	-2151.
	-2.7	-.2	87	10	-30.7	-19.7			
5.000							33.2	-21.4	-2092.
	-5.6	-.5	270	29	-20.7	-15.8			
10.000							38.8	-20.9	-1916.
	-11.6	-.9	628	51	-18.5	-17.9			
15.000							50.4	-20.0	-1519.
	-10.5	-1.7	663	87	-15.9	-19.5			
20.000							60.9	-18.3	-1110.
	-7.6	-2.4	647	128	-11.7	-18.9			
25.000							68.5	-15.9	-733.
	-3.7	-3.2	645	177	-5.8	-18.1			
30.000							72.2	-12.7	-384.
	.5	-4.0	651	230	.8	-17.3			
35.000							71.7	-8.7	-123.
	5.4	-5.1	663	325	8.1	-15.6			
40.000							66.3	-3.6	28.
	9.0	-3.2	651	369	13.8	-8.7			
45.000							57.3	-.4	162.
	12.0	-1.2	662	367	18.2	-3.4			
50.000							45.3	.8	229.
	13.3	-.1	655	305	20.3	-.3			
55.000							32.1	.9	226.
	11.9	.2	641	223	18.6	.9			
60.000							20.1	.7	198.
	9.7	.3	637	169	15.2	2.0			
65.000							10.4	.4	162.
	7.5	.2	640	117	11.8	1.9			
70.000							2.9	.1	132.
	3.6	.1	445	74	8.1	1.2			
75.000							-.7	.1	114.
	.5	.0	254	40	2.0	.5			
80.000							-1.2	.0	103.
	-.1	.0	172	23	-.6	.7			
85.000							-1.1	.0	76.
	-.5	.0	100	14	-5.0	2.0			
90.000							-.6	-.0	33.
	-.6	.0	29	0	-22.0	2.3			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NB WALL
WIND DIRECTION 230 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							29.7	-30.3	-2966.
	-2.3	-.2	87	10	-26.7	-21.8			
5.000							32.0	-30.1	-2906.
	-5.0	-.5	270	29	-18.4	-18.6			
10.000							37.0	-29.5	-2706.
	-9.8	-1.1	628	51	-15.6	-20.7			
15.000							46.8	-28.5	-2296.
	-8.4	-1.9	663	87	-12.6	-21.4			
20.000							55.1	-26.6	-1879.
	-5.5	-2.6	647	128	-8.4	-20.4			
25.000							60.6	-24.0	-1495.
	-2.0	-3.6	645	177	-3.1	-20.3			
30.000							62.6	-20.4	-1139.
	1.8	-4.5	651	230	2.8	-19.7			
35.000							60.8	-15.9	-846.
	5.3	-6.1	663	325	7.9	-18.9			
40.000							55.6	-9.7	-641.
	7.0	-5.0	651	369	10.7	-13.5			
45.000							48.6	-4.7	-431.
	10.2	-2.7	662	367	15.4	-7.5			
50.000							38.4	-2.0	-271.
	12.2	-1.0	655	305	18.7	-3.2			
55.000							26.1	-1.0	-174.
	10.9	-.4	641	223	17.0	-1.9			
60.000							15.3	-.6	-118.
	8.5	-.1	637	169	13.4	-.8			
65.000							6.8	-.3	-80.
	6.2	-.2	640	117	9.7	-1.7			
70.000							.6	-.3	-44.
	2.3	-.2	445	74	5.6	-2.4			
75.000							-1.9	-.1	-8.
	-.2	-.1	254	40	-.7	-2.1			
80.000							-1.8	-.0	17.
	-.5	-.0	172	23	-3.0	-.7			
85.000							-1.2	.0	18.
	-.6	.0	100	14	-6.5	1.2			
90.000							-.6	-.0	8.
	-.6	.0	29	0	-20.7	3.8			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 240 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							26.3	-35.3	-3560.
	-2.3	-.2	87	10	-26.2	-22.9			
5.000							28.5	-35.1	-3486.
	-3.9	-.6	270	29	-14.4	-19.4			
10.000							32.4	-34.5	-3283.
	-6.7	-1.0	628	51	-10.7	-19.7			
15.000							39.2	-33.5	-2880.
	-5.0	-1.7	663	87	-7.5	-19.8			
20.000							44.2	-31.8	-2472.
	-2.5	-2.5	647	128	-3.9	-19.6			
25.000							46.7	-29.3	-2089.
	.0	-3.4	645	177	.0	-19.5			
30.000							46.7	-25.8	-1727.
	2.9	-4.7	651	230	4.5	-20.3			
35.000							43.8	-21.2	-1401.
	4.6	-6.5	663	325	7.0	-20.0			
40.000							39.2	-14.6	-1145.
	4.7	-6.2	651	369	7.2	-16.8			
45.000							34.5	-8.5	-892.
	7.6	-4.0	662	367	11.5	-11.0			
50.000							26.8	-4.4	-670.
	10.0	-1.9	655	305	15.3	-6.1			
55.000							16.8	-2.6	-494.
	8.5	-1.0	641	223	13.3	-4.4			
60.000							8.3	-1.6	-377.
	6.2	-.5	637	169	9.8	-3.0			
65.000							2.1	-1.1	-289.
	4.1	-.5	640	117	6.4	-4.0			
70.000							-2.1	-.6	-212.
	1.1	-.4	445	74	2.6	-5.2			
75.000							-3.2	-.2	-142.
	-.6	-.2	254	40	-2.4	-4.4			
80.000							-2.6	-.0	-88.
	-.8	-.0	172	23	-4.8	-1.9			
85.000							-1.8	.0	-55.
	-1.0	.0	100	14	-9.7	.8			
90.000							-.8	-.0	-23.
	-.8	.0	29	0	-27.9	6.5			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 250 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							21.7	-37.1	-3800.
	-2.2	-.2	87	10	-25.1	-22.1			
5.000							23.8	-36.9	-3716.
	-2.4	-.6	270	29	-9.0	-18.9			
10.000							26.3	-36.3	-3536.
	-2.9	-.9	628	51	-4.6	-17.2			
15.000							29.1	-35.5	-3163.
	-1.4	-1.5	663	87	-2.0	-16.8			
20.000							30.5	-34.0	-2790.
	-.1	-2.3	647	128	-.2	-17.6			
25.000							30.6	-31.8	-2432.
	1.0	-3.1	645	177	1.6	-17.5			
30.000							29.6	-28.7	-2086.
	2.8	-4.3	651	230	4.3	-18.6			
35.000							26.8	-24.4	-1768.
	3.2	-6.2	663	325	4.9	-18.9			
40.000							23.5	-18.2	-1506.
	2.0	-6.6	651	369	3.1	-17.9			
45.000							21.5	-11.6	-1224.
	4.4	-4.9	662	367	6.6	-13.4			
50.000							17.1	-6.7	-967.
	6.8	-2.7	655	305	10.4	-8.8			
55.000							10.3	-4.0	-757.
	5.9	-1.5	641	223	9.2	-6.6			
60.000							4.4	-2.6	-606.
	4.3	-.8	637	169	6.8	-4.9			
65.000							.0	-1.7	-482.
	2.9	-.7	640	117	4.5	-5.8			
70.000							-2.9	-1.1	-368.
	.5	-.6	445	74	1.1	-8.1			
75.000							-3.3	-.5	-251.
	-.8	-.3	254	40	-3.0	-8.2			
80.000							-2.6	-.1	-155.
	-.9	-.1	172	23	-5.2	-4.9			
85.000							-1.7	-.0	-87.
	-1.0	-.0	100	14	-9.6	-1.5			
90.000							-.7	-.0	-31.
	-.7	.0	29	0	-23.4	10.1			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 260 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							18.5	-35.8	-3837.
	-1.7	-.2	87	10	-19.3	-20.2			
5.000							20.2	-35.6	-3729.
	-1.0	-.6	270	29	-3.6	-18.8			
10.000							21.2	-35.0	-3548.
	.3	-.8	628	51	.5	-15.1			
15.000							20.8	-34.3	-3216.
	1.3	-1.1	663	87	2.0	-12.2			
20.000							19.5	-33.2	-2908.
	1.7	-1.7	647	128	2.6	-13.3			
25.000							17.9	-31.5	-2624.
	1.9	-2.4	645	177	3.0	-13.3			
30.000							15.9	-29.1	-2358.
	2.9	-3.4	651	230	4.4	-14.8			
35.000							13.1	-25.7	-2102.
	2.5	-5.1	663	325	3.8	-15.8			
40.000							10.5	-20.6	-1878.
	.0	-6.1	651	369	.0	-16.5			
45.000							10.5	-14.5	-1597.
	1.4	-5.1	662	367	2.2	-14.0			
50.000							9.1	-9.4	-1336.
	3.6	-3.3	655	305	5.4	-10.9			
55.000							5.5	-6.0	-1116.
	3.5	-2.0	641	223	5.5	-9.1			
60.000							2.0	-4.0	-931.
	2.9	-1.3	637	169	4.6	-7.7			
65.000							-.9	-2.7	-757.
	2.3	-1.1	640	117	3.7	-9.0			
70.000							-3.3	-1.7	-579.
	.5	-.9	445	74	1.1	-12.4			
75.000							-3.8	-.7	-391.
	-.7	-.5	254	40	-2.6	-12.9			
80.000							-3.1	-.2	-238.
	-1.0	-.2	172	23	-5.6	-7.7			
85.000							-2.1	-.0	-125.
	-1.2	-.0	100	14	-12.0	-3.1			
90.000							-.9	.0	-43.
	-.9	.0	29	0	-32.6	12.6			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 270 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							24.9	-33.8	-3627.
	-.5	-.1	87	10	-6.0	-7.4			
5.000							25.4	-33.7	-3527.
	.3	-.4	270	29	1.2	-13.2			
10.000							25.1	-33.3	-3376.
	1.9	-.6	628	51	3.1	-12.1			
15.000							23.2	-32.7	-3135.
	2.7	-.7	663	87	4.0	-7.9			
20.000							20.5	-32.0	-2926.
	2.9	-1.1	647	128	4.5	-8.7			
25.000							17.6	-30.9	-2743.
	3.1	-1.6	645	177	4.9	-9.1			
30.000							14.5	-29.3	-2571.
	3.9	-2.5	651	230	6.0	-10.9			
35.000							10.6	-26.8	-2389.
	3.3	-3.9	663	325	4.9	-12.1			
40.000							7.3	-22.8	-2202.
	-.5	-5.6	651	369	-.7	-15.2			
45.000							7.8	-17.2	-1924.
	.1	-5.5	662	367	.1	-14.9			
50.000							7.8	-11.7	-1661.
	1.9	-4.0	655	305	2.9	-13.1			
55.000							5.9	-7.7	-1425.
	2.8	-2.5	641	223	4.3	-11.2			
60.000							3.1	-5.3	-1198.
	2.8	-1.7	637	169	4.4	-10.3			
65.000							.3	-3.5	-968.
	2.8	-1.5	640	117	4.4	-12.5			
70.000							-2.6	-2.0	-719.
	.9	-1.2	445	74	2.1	-16.0			
75.000							-3.5	-.9	-463.
	-.5	-.6	254	40	-2.1	-15.5			
80.000							-3.0	-.2	-268.
	-.9	-.2	172	23	-5.3	-8.6			
85.000							-2.1	-.0	-130.
	-1.2	-.0	100	14	-11.8	-2.6			
90.000							-.9	-.0	-41.
	-.9	.0	29	0	-30.8	11.0			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 280 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							37.1	-34.0	-3378.
	-.4	.0	87	10	-4.0	3.4			
5.000							37.5	-34.0	-3251.
	.4	-.2	270	29	1.4	-6.1			
10.000							37.1	-33.8	-3127.
	1.9	-.4	628	51	3.0	-7.0			
15.000							35.2	-33.5	-2998.
	3.0	-.4	663	87	4.5	-4.0			
20.000							32.2	-33.1	-2897.
	3.6	-.6	647	128	5.6	-4.9			
25.000							28.6	-32.5	-2808.
	4.6	-1.1	645	177	7.1	-6.0			
30.000							24.0	-31.4	-2717.
	5.8	-1.9	651	230	8.9	-8.2			
35.000							18.2	-29.5	-2588.
	5.8	-3.2	663	325	8.7	-9.9			
40.000							12.4	-26.3	-2408.
	1.2	-5.9	651	369	1.8	-16.0			
45.000							11.2	-20.4	-2117.
	.9	-6.4	662	367	1.4	-17.3			
50.000							10.3	-14.1	-1840.
	2.1	-4.8	655	305	3.3	-15.9			
55.000							8.1	-9.2	-1582.
	3.0	-3.0	641	223	4.8	-13.6			
60.000							5.1	-6.2	-1312.
	3.1	-2.2	637	169	4.8	-12.9			
65.000							2.0	-4.0	-1031.
	3.2	-1.8	640	117	5.0	-15.5			
70.000							-1.2	-2.2	-728.
	1.3	-1.4	445	74	3.0	-18.9			
75.000							-2.5	-.8	-434.
	-.1	-.7	254	40	-.4	-17.6			
80.000							-2.4	-.1	-222.
	-.6	-.1	172	23	-3.7	-6.3			
85.000							-1.8	.0	-91.
	-1.0	.0	100	14	-9.9	2.9			
90.000							-.8	.0	-26.
	-.8	.0	29	0	-27.2	2.0			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 290 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							52.6	-35.3	-3360.
	-.2	.1	87	10	-2.3	6.7			
5.000							52.8	-35.4	-3259.
	.6	-.1	270	29	2.2	-2.2			
10.000							52.2	-35.3	-3188.
	2.5	-.1	628	51	4.0	-2.4			
15.000							49.7	-35.2	-3140.
	4.1	-.1	663	87	6.2	-1.0			
20.000							45.6	-35.1	-3106.
	5.0	-.4	647	128	7.7	-3.0			
25.000							40.6	-34.7	-3068.
	7.1	-.7	645	177	11.0	-4.0			
30.000							33.5	-34.0	-3020.
	9.0	-1.4	651	230	13.9	-6.1			
35.000							24.5	-32.6	-2912.
	9.3	-2.8	663	325	14.1	-8.6			
40.000							15.2	-29.8	-2736.
	4.0	-5.9	651	369	6.1	-16.1			
45.000							11.2	-23.9	-2465.
	2.8	-7.0	662	367	4.2	-19.0			
50.000							8.4	-16.9	-2187.
	2.9	-5.7	655	305	4.4	-18.7			
55.000							5.6	-11.2	-1895.
	3.0	-3.7	641	223	4.7	-16.8			
60.000							2.6	-7.5	-1567.
	2.3	-2.8	637	169	3.7	-16.4			
65.000							.3	-4.7	-1225.
	1.7	-2.1	640	117	2.6	-18.2			
70.000							-1.4	-2.6	-875.
	1.2	-1.6	445	74	2.6	-22.3			
75.000							-2.6	-.9	-551.
	.6	-.9	254	40	2.4	-21.7			
80.000							-3.2	-.0	-316.
	-.4	-.1	172	23	-2.3	-5.7			
85.000							-2.8	.1	-162.
	-1.4	.1	100	14	-14.2	7.0			
90.000							-1.4	-.0	-59.
	-1.4	-.0	29	0	-47.2	-1.6			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 300 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							75.1	-32.6	-3142.
	-.5	.1	87	10	-6.0	8.3			
5.000							75.6	-32.7	-3059.
	.8	.0	270	29	3.1	.3			
10.000							74.8	-32.7	-3025.
	4.0	.0	628	51	6.3	.7			
15.000							70.8	-32.7	-3036.
	6.1	.1	663	87	9.1	1.0			
20.000							64.8	-32.8	-3058.
	7.4	-.1	647	128	11.5	-.4			
25.000							57.3	-32.7	-3072.
	10.3	-.1	645	177	16.0	-.6			
30.000							47.0	-32.6	-3070.
	13.1	-.6	651	230	20.1	-2.6			
35.000							33.9	-32.0	-3010.
	13.6	-1.8	663	325	20.5	-5.4			
40.000							20.3	-30.3	-2875.
	7.8	-4.9	651	369	12.0	-13.2			
45.000							12.5	-25.4	-2665.
	5.9	-6.6	662	367	8.8	-18.0			
50.000							6.7	-18.8	-2425.
	4.5	-6.1	655	305	6.9	-19.9			
55.000							2.1	-12.7	-2131.
	3.4	-4.2	641	223	5.3	-18.7			
60.000							-1.3	-8.6	-1782.
	1.6	-3.2	637	169	2.5	-18.8			
65.000							-2.9	-5.4	-1400.
	-.2	-2.5	640	117	-.3	-21.3			
70.000							-2.7	-2.9	-994.
	.0	-1.9	445	74	.1	-25.1			
75.000							-2.8	-1.0	-615.
	.2	-1.0	254	40	.9	-23.9			
80.000							-3.0	-.1	-346.
	-.5	-.2	172	23	-3.1	-7.0			
85.000							-2.5	.1	-170.
	-1.3	.1	100	14	-12.8	6.2			
90.000							-1.2	.0	-58.
	-1.2	.0	29	0	-40.8	1.1			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 310 CONFIGURATION A REFERENCE PRESSURE 17.9 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							101.8	-27.6	-2635.
	-.8	.1	87	10	-9.4	10.2			
5.000							102.6	-27.7	-2581.
	1.4	.1	270	29	5.2	3.2			
10.000							101.2	-27.8	-2588.
	6.0	.2	628	51	9.5	3.5			
15.000							95.2	-28.0	-2652.
	8.4	.2	663	87	12.6	2.8			
20.000							86.9	-28.2	-2719.
	10.0	.3	647	128	15.5	2.4			
25.000							76.8	-28.5	-2779.
	13.4	.5	645	177	20.7	2.9			
30.000							63.5	-29.1	-2819.
	16.8	.2	651	230	25.8	.9			
35.000							46.7	-29.3	-2826.
	18.1	-.6	663	325	27.3	-2.0			
40.000							28.6	-28.6	-2775.
	12.5	-3.4	651	369	19.2	-9.2			
45.000							16.0	-25.2	-2631.
	9.9	-5.8	662	367	14.9	-15.7			
50.000							6.2	-19.4	-2442.
	6.8	-6.2	655	305	10.4	-20.3			
55.000							-.6	-13.2	-2176.
	4.3	-4.4	641	223	6.7	-19.8			
60.000							-4.9	-8.8	-1833.
	1.4	-3.4	637	169	2.1	-20.4			
65.000							-6.3	-5.4	-1448.
	-1.5	-2.5	640	117	-2.3	-21.7			
70.000							-4.8	-2.8	-1030.
	-1.2	-1.7	445	74	-2.8	-23.5			
75.000							-3.6	-1.1	-638.
	-.4	-.9	254	40	-1.4	-22.5			
80.000							-3.2	-.2	-372.
	-.9	-.2	172	23	-5.4	-9.0			
85.000							-2.3	.0	-187.
	-1.3	.0	100	14	-13.1	1.4			
90.000							-1.0	-.0	-65.
	-1.0	.0	29	0	-34.1	4.5			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 320 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-.9	.1	87	10	-9.9	12.7	125.1	-21.6	-1963.
5.000	2.1	.2	270	29	7.8	7.5	126.0	-21.8	-1914.
10.000	8.6	.4	628	51	13.6	7.3	123.9	-22.0	-1956.
15.000	11.1	.4	663	87	16.7	4.5	115.3	-22.4	-2088.
20.000	12.7	.5	647	128	19.7	3.9	104.3	-22.7	-2199.
25.000	16.5	.8	645	177	25.5	4.3	91.5	-23.2	-2290.
30.000	19.8	.6	651	230	30.4	2.7	75.1	-24.0	-2363.
35.000	21.1	-.1	663	325	31.8	-.4	55.2	-24.6	-2420.
40.000	16.1	-2.2	651	369	24.8	-6.0	34.2	-24.5	-2429.
45.000	13.2	-4.8	662	367	20.0	-13.0	18.1	-22.3	-2325.
50.000	8.9	-5.7	655	305	13.5	-18.6	4.8	-17.5	-2175.
55.000	4.8	-3.9	641	223	7.5	-17.7	-4.0	-11.8	-1952.
60.000	.8	-3.1	637	169	1.2	-18.5	-8.8	-7.8	-1644.
65.000	-3.0	-2.3	640	117	-4.6	-19.9	-9.6	-4.7	-1291.
70.000	-2.5	-1.5	445	74	-5.5	-20.3	-6.7	-2.4	-904.
75.000	-.9	-.8	254	40	-3.7	-18.5	-4.2	-.9	-551.
80.000	-1.2	-.2	172	23	-6.9	-7.2	-3.3	-.1	-327.
85.000	-1.3	.0	100	14	-12.6	1.4	-2.1	.0	-171.
90.000	-.8	.0	29	0	-28.1	2.4	-.8	.0	-62.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 330 CONFIGURATION A REFERENCE PRESSURE 17.9 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							139.4	-14.4	-1269.
	-.7	.1	87	10	-7.5	14.0			
5.000							140.0	-14.5	-1217.
	2.3	.3	270	29	8.6	10.3			
10.000							137.7	-14.8	-1266.
	10.4	.4	628	51	16.5	8.3			
15.000							127.3	-15.3	-1423.
	13.2	.4	663	87	19.9	4.9			
20.000							114.1	-15.7	-1548.
	15.2	.5	647	128	23.5	4.0			
25.000							98.9	-16.2	-1653.
	18.7	.9	645	177	29.0	4.8			
30.000							80.2	-17.0	-1750.
	21.6	.8	651	230	33.2	3.4			
35.000							58.6	-17.8	-1830.
	22.6	.2	663	325	34.1	.6			
40.000							36.0	-18.0	-1875.
	18.3	-1.0	651	369	28.1	-2.8			
45.000							17.7	-17.0	-1801.
	15.2	-3.3	662	367	22.9	-9.0			
50.000							2.5	-13.7	-1696.
	9.9	-4.5	655	305	15.1	-14.8			
55.000							-7.4	-9.2	-1536.
	4.8	-3.1	641	223	7.5	-13.8			
60.000							-12.2	-6.1	-1293.
	.2	-2.5	637	169	.2	-14.6			
65.000							-12.4	-3.6	-1008.
	-4.0	-1.9	640	117	-6.3	-16.0			
70.000							-8.3	-1.8	-696.
	-3.4	-1.2	445	74	-7.7	-15.8			
75.000							-4.9	-.6	-416.
	-1.5	-.5	254	40	-6.1	-13.4			
80.000							-3.4	-.1	-246.
	-1.4	-.1	172	23	-8.3	-4.3			
85.000							-2.0	.0	-129.
	-1.3	.0	100	14	-12.5	2.8			
90.000							-.7	-.0	-49.
	-.7	-.0	29	0	-24.6	-.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 340 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							138.1	-7.4	-648.
	-.4	.1	87	10	-5.0	13.4			
5.000							138.5	-7.6	-602.
	2.9	.3	270	29	10.8	11.6			
10.000							135.6	-7.9	-651.
	11.7	.4	628	51	18.6	7.7			
15.000							123.9	-8.3	-785.
	14.3	.4	663	87	21.6	4.5			
20.000							109.6	-8.7	-878.
	16.2	.4	647	128	25.0	3.1			
25.000							93.4	-9.1	-956.
	19.0	.6	645	177	29.5	3.6			
30.000							74.4	-9.7	-1037.
	21.0	.6	651	230	32.2	2.6			
35.000							53.4	-10.3	-1108.
	21.8	.3	663	325	32.9	1.0			
40.000							31.6	-10.6	-1147.
	18.8	-.1	651	369	28.8	-.3			
45.000							12.8	-10.5	-1096.
	15.7	-1.8	662	367	23.8	-5.0			
50.000							-2.9	-8.7	-1026.
	9.9	-3.0	655	305	15.2	-9.8			
55.000							-12.9	-5.7	-921.
	4.1	-2.0	641	223	6.5	-9.0			
60.000							-17.0	-3.7	-762.
	-1.0	-1.6	637	169	-1.5	-9.4			
65.000							-16.0	-2.1	-579.
	-5.5	-1.2	640	117	-8.6	-9.9			
70.000							-10.5	-.9	-386.
	-4.5	-.7	445	74	-10.2	-9.3			
75.000							-6.0	-.2	-220.
	-2.2	-.3	254	40	-8.7	-7.4			
80.000							-3.8	.1	-127.
	-1.8	-.0	172	23	-10.4	-.6			
85.000							-2.0	.1	-68.
	-1.3	.1	100	14	-13.2	4.8			
90.000							-.7	.0	-29.
	-.7	-.0	29	0	-23.7	-4.1			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 350 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-.0	.1	87	10	-.2	11.6	130.5	-2.7	-156.
5.000	3.8	.4	270	29	14.1	12.0	130.5	-2.8	-153.
10.000	13.2	.3	628	51	21.1	6.7	126.7	-3.1	-219.
15.000	15.1	.2	663	87	22.7	2.8	113.5	-3.5	-339.
20.000	16.3	.2	647	128	25.1	1.8	98.4	-3.7	-411.
25.000	18.5	.5	645	177	28.6	2.6	82.1	-4.0	-460.
30.000	19.4	.3	651	230	29.7	1.4	63.7	-4.4	-511.
35.000	19.9	.2	663	325	30.0	.5	44.3	-4.8	-545.
40.000	18.2	.0	651	369	28.0	.1	24.4	-4.9	-563.
45.000	15.5	-.8	662	367	23.4	-2.3	6.2	-5.0	-536.
50.000	9.6	-1.4	655	305	14.6	-4.7	-9.3	-4.1	-501.
55.000	3.3	-.9	641	223	5.2	-4.3	-18.9	-2.7	-454.
60.000	-2.1	-.8	637	169	-3.3	-4.7	-22.2	-1.7	-375.
65.000	-7.0	-.6	640	117	-11.0	-4.9	-20.1	-1.0	-283.
70.000	-5.8	-.3	445	74	-13.0	-4.2	-13.0	-.4	-189.
75.000	-2.9	-.1	254	40	-11.4	-3.0	-7.3	-.1	-111.
80.000	-2.3	.0	172	23	-13.2	.4	-4.4	.1	-73.
85.000	-1.5	.0	100	14	-14.8	3.2	-2.1	.0	-44.
90.000	-.6	-.0	29	0	-22.3	-3.0	-.6	-.0	-22.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 0 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							108.4	-46.3	-3093.
	9.0	-3.3	579	213	15.6	-15.7			
5.000							99.4	-42.9	-2798.
	8.7	-3.4	594	243	14.6	-14.2			
10.000							90.8	-39.5	-2537.
	9.6	-3.7	612	291	15.7	-12.6			
15.000							81.2	-35.8	-2261.
	9.9	-5.7	653	374	15.2	-15.2			
20.000							71.2	-30.1	-1966.
	6.7	-7.9	639	443	10.5	-17.9			
25.000							64.5	-22.2	-1785.
	6.8	-8.3	630	455	10.7	-18.3			
30.000							57.8	-13.8	-1596.
	10.5	-5.6	656	364	16.0	-15.3			
35.000							47.3	-8.3	-1270.
	10.2	-3.8	655	237	15.6	-15.9			
40.000							37.1	-4.5	-959.
	9.6	-2.1	658	180	14.6	-11.7			
45.000							27.4	-2.4	-659.
	8.1	-1.2	683	139	11.9	-9.0			
50.000							19.3	-1.2	-423.
	5.8	-.5	719	105	8.0	-4.5			
55.000							13.5	-.7	-286.
	4.8	-.4	759	78	6.3	-5.2			
60.000							8.7	-.3	-214.
	3.8	-.1	801	56	4.7	-2.6			
65.000							4.9	-.1	-214.
	3.1	-.2	478	35	6.4	-7.1			
70.000							1.9	.1	-107.
	1.9	.1	154	13	12.1	8.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 10 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							114.0	-46.8	-3430.
	9.7	-3.4	579	213	16.8	-15.8			
5.000							104.2	-43.4	-3101.
	9.3	-3.5	594	243	15.7	-14.3			
10.000							94.9	-39.9	-2809.
	10.4	-3.6	612	291	17.1	-12.5			
15.000							84.5	-36.3	-2494.
	11.0	-5.7	653	374	16.9	-15.3			
20.000							73.4	-30.6	-2144.
	7.7	-7.9	639	443	12.0	-17.9			
25.000							65.8	-22.7	-1917.
	7.5	-8.4	630	455	12.0	-18.4			
30.000							58.2	-14.3	-1690.
	11.1	-5.7	656	364	16.9	-15.5			
35.000							47.1	-8.6	-1334.
	10.8	-3.8	655	237	16.4	-16.0			
40.000							36.4	-4.8	-998.
	10.4	-2.2	658	180	15.8	-12.2			
45.000							26.0	-2.6	-664.
	8.7	-1.3	683	139	12.8	-9.6			
50.000							17.2	-1.3	-399.
	6.1	-.5	719	105	8.4	-4.9			
55.000							11.2	-.8	-242.
	4.5	-.4	759	78	6.0	-5.7			
60.000							6.7	-.3	-162.
	2.9	-.2	801	56	3.6	-3.7			
65.000							3.8	-.1	-167.
	2.2	-.2	478	35	4.6	-5.4			
70.000							1.6	.1	-91.
	1.6	.1	154	13	10.2	6.1			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 20 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							125.4	-46.8	-4124.
	10.5	-3.1	579	213	18.2	-14.7			
5.000							114.9	-43.7	-3750.
	10.2	-3.3	594	243	17.2	-13.7			
10.000							104.7	-40.3	-3407.
	11.8	-3.5	612	291	19.2	-12.1			
15.000							92.9	-36.8	-3021.
	12.9	-5.9	653	374	19.8	-15.7			
20.000							80.0	-30.9	-2567.
	9.4	-8.0	639	443	14.8	-18.0			
25.000							70.5	-22.9	-2239.
	9.2	-8.2	630	455	14.6	-18.0			
30.000							61.3	-14.7	-1922.
	12.7	-5.6	656	364	19.4	-15.3			
35.000							48.6	-9.1	-1482.
	12.2	-3.8	655	237	18.7	-16.2			
40.000							36.4	-5.3	-1073.
	11.4	-2.4	658	180	17.3	-13.5			
45.000							25.0	-2.9	-688.
	9.5	-1.5	683	139	14.0	-10.6			
50.000							15.5	-1.4	-378.
	6.9	-.6	719	105	9.6	-5.5			
55.000							8.6	-.8	-176.
	4.7	-.5	759	78	6.3	-6.5			
60.000							3.9	-.3	-66.
	2.4	-.3	801	56	3.0	-4.9			
65.000							1.5	-.0	-59.
	.8	-.1	478	35	1.6	-3.7			
70.000							.7	.1	-46.
	.7	.1	154	13	4.5	6.3			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 30 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							130.5	-44.0	-4567.
	9.9	-2.7	579	213	17.1	-12.7			
5.000							120.6	-41.3	-4206.
	10.1	-3.0	594	243	17.1	-12.4			
10.000							110.5	-38.3	-3847.
	12.5	-3.3	612	291	20.5	-11.4			
15.000							97.9	-35.0	-3405.
	14.7	-5.6	653	374	22.5	-15.0			
20.000							83.2	-29.4	-2841.
	11.3	-7.4	639	443	17.7	-16.8			
25.000							71.8	-21.9	-2400.
	11.0	-7.7	630	455	17.5	-17.0			
30.000							60.8	-14.2	-1981.
	14.0	-5.6	656	364	21.4	-15.3			
35.000							46.8	-8.6	-1471.
	13.4	-3.7	655	237	20.4	-15.7			
40.000							33.4	-4.9	-1003.
	11.6	-2.3	658	180	17.6	-12.9			
45.000							21.8	-2.6	-595.
	9.5	-1.4	683	139	13.9	-10.0			
50.000							12.4	-1.2	-272.
	6.6	-.5	719	105	9.2	-4.7			
55.000							5.8	-.7	-62.
	4.4	-.4	759	78	5.8	-5.7			
60.000							1.4	-.3	48.
	2.2	-.3	801	56	2.7	-5.1			
65.000							-.8	.0	56.
	-.5	-.1	478	35	-1.0	-2.9			
70.000							-.3	.1	6.
	-.3	.1	154	13	-2.0	9.2			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 40 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							123.0	-37.7	-4454.
	8.2	-2.2	579	213	14.2	-10.2			
5.000							114.8	-35.5	-4148.
	9.0	-2.6	594	243	15.2	-10.9			
10.000							105.8	-32.8	-3821.
	11.8	-3.0	612	291	19.3	-10.3			
15.000							94.0	-29.8	-3395.
	14.6	-5.0	653	374	22.4	-13.4			
20.000							79.4	-24.8	-2821.
	12.3	-6.1	639	443	19.3	-13.8			
25.000							67.1	-18.7	-2327.
	12.2	-6.4	630	455	19.4	-14.0			
30.000							54.8	-12.3	-1841.
	14.3	-5.2	656	364	21.9	-14.3			
35.000							40.5	-7.1	-1299.
	13.3	-3.4	655	237	20.3	-14.2			
40.000							27.2	-3.8	-817.
	10.7	-2.0	658	180	16.2	-11.0			
45.000							16.5	-1.8	-432.
	8.3	-1.0	683	139	12.2	-7.4			
50.000							8.2	-.8	-138.
	5.6	-.3	719	105	7.8	-2.5			
55.000							2.6	-.5	55.
	3.3	-.3	759	78	4.4	-4.4			
60.000							-.7	-.2	136.
	1.4	-.2	801	56	1.7	-3.7			
65.000							-2.1	.1	122.
	-1.3	-.1	478	35	-2.6	-1.9			
70.000							-.9	.1	36.
	-.9	.1	154	13	-5.7	9.3			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 50 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							105.5	-30.0	-3968.
	6.5	-1.7	579	213	11.2	-8.0			
5.000							99.0	-28.3	-3724.
	7.3	-2.2	594	243	12.3	-9.0			
10.000							91.7	-26.1	-3455.
	10.0	-2.6	612	291	16.4	-8.8			
15.000							81.6	-23.5	-3084.
	13.3	-4.3	653	374	20.4	-11.4			
20.000							68.3	-19.3	-2548.
	12.5	-4.7	639	443	19.6	-10.6			
25.000							55.8	-14.6	-2030.
	12.9	-4.8	630	455	20.5	-10.5			
30.000							42.9	-9.8	-1497.
	14.2	-4.3	656	364	21.6	-11.9			
35.000							28.7	-5.5	-935.
	12.5	-2.6	655	237	19.0	-11.2			
40.000							16.3	-2.8	-463.
	9.1	-1.7	658	180	13.9	-9.4			
45.000							7.1	-1.1	-124.
	6.4	-.8	683	139	9.3	-5.7			
50.000							.8	-.3	110.
	3.6	-.1	719	105	5.1	-1.1			
55.000							-2.9	-.2	246.
	1.3	-.2	759	78	1.7	-2.4			
60.000							-4.1	-.0	264.
	-.5	-.1	801	56	-.6	-1.9			
65.000							-3.7	.1	196.
	-2.3	-.0	478	35	-4.8	-.0			
70.000							-1.4	.1	66.
	-1.4	.1	154	13	-9.1	7.2			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 60 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							84.7	-21.4	-3361.
	4.9	-1.3	579	213	8.4	-6.2			
5.000							79.8	-20.0	-3182.
	5.8	-2.0	594	243	9.8	-8.1			
10.000							74.0	-18.1	-2966.
	8.1	-2.3	612	291	13.3	-7.8			
15.000							65.8	-15.8	-2660.
	11.0	-3.4	653	374	16.8	-9.2			
20.000							54.9	-12.4	-2208.
	11.7	-3.2	639	443	18.3	-7.2			
25.000							43.2	-9.2	-1709.
	12.6	-2.8	630	455	20.0	-6.1			
30.000							30.5	-6.4	-1170.
	13.2	-2.8	656	364	20.2	-7.8			
35.000							17.3	-3.6	-617.
	11.1	-1.7	655	237	16.9	-7.2			
40.000							6.2	-1.9	-173.
	7.3	-1.2	658	180	11.1	-6.5			
45.000							-1.1	-.7	119.
	4.4	-.6	683	139	6.4	-4.6			
50.000							-5.5	-.0	300.
	1.8	-.0	719	105	2.5	-.4			
55.000							-7.3	-.0	388.
	-.5	-.1	759	78	-.7	-1.2			
60.000							-6.8	.1	356.
	-1.6	-.1	801	56	-1.9	-1.0			
65.000							-5.2	.1	267.
	-3.1	.1	478	35	-6.6	1.6			
70.000							-2.1	.1	102.
	-2.1	.1	154	13	-13.5	6.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 70 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							64.2	-13.8	-2685.
	4.8	-.9	579	213	8.3	-4.4			
5.000							59.3	-12.9	-2492.
	5.2	-1.6	594	243	8.8	-6.4			
10.000							54.1	-11.3	-2285.
	6.7	-1.8	612	291	11.0	-6.1			
15.000							47.4	-9.5	-2021.
	9.0	-2.5	653	374	13.8	-6.7			
20.000							38.3	-7.1	-1642.
	10.7	-2.0	639	443	16.8	-4.4			
25.000							27.6	-5.1	-1177.
	11.9	-1.4	630	455	18.8	-3.1			
30.000							15.8	-3.7	-660.
	11.9	-1.7	656	364	18.1	-4.7			
35.000							3.9	-2.0	-148.
	9.2	-1.0	655	237	14.0	-4.0			
40.000							-5.3	-1.0	239.
	5.0	-.8	658	180	7.5	-4.3			
45.000							-10.3	-.2	451.
	2.1	-.5	683	139	3.1	-3.3			
50.000							-12.4	.2	554.
	-.1	.0	719	105	-.2	.2			
55.000							-12.3	.2	580.
	-2.2	.0	759	78	-2.8	.1			
60.000							-10.1	.2	497.
	-2.9	-.0	801	56	-3.7	-.2			
65.000							-7.2	.2	366.
	-4.3	.1	478	35	-9.1	2.8			
70.000							-2.8	.1	143.
	-2.8	.1	154	13	-18.4	7.1			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 80 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							44.5	-8.5	-1893.
	4.9	-.4	579	213	8.5	-2.0			
5.000							39.6	-8.1	-1671.
	5.1	-1.0	594	243	8.5	-4.2			
10.000							34.5	-7.0	-1450.
	6.1	-1.3	612	291	10.0	-4.5			
15.000							28.4	-5.7	-1193.
	7.9	-1.7	653	374	12.0	-4.7			
20.000							20.5	-4.0	-853.
	9.8	-1.4	639	443	15.4	-3.1			
25.000							10.7	-2.6	-413.
	10.9	-.9	630	455	17.3	-2.0			
30.000							-.3	-1.7	76.
	10.6	-1.0	656	364	16.1	-2.7			
35.000							-10.8	-.8	539.
	7.3	-.4	655	237	11.1	-1.7			
40.000							-18.1	-.4	850.
	3.1	-.5	658	180	4.7	-2.5			
45.000							-21.2	.1	982.
	-.0	-.3	683	139	-.0	-2.3			
50.000							-21.2	.4	986.
	-2.7	-.0	719	105	-3.7	-.2			
55.000							-18.5	.4	887.
	-4.4	.1	759	78	-5.8	1.3			
60.000							-14.1	.3	699.
	-5.0	.1	801	56	-6.2	1.9			
65.000							-9.1	.2	468.
	-5.7	.1	478	35	-11.9	3.5			
70.000							-3.4	.1	174.
	-3.4	.1	154	13	-22.1	8.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 90 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							31.6	-5.1	-1291.
	4.0	-.2	579	213	6.8	-1.1			
5.000							27.6	-4.8	-1108.
	4.4	-.6	594	243	7.5	-2.7			
10.000							23.2	-4.2	-912.
	5.5	-.9	612	291	8.9	-3.1			
15.000							17.7	-3.3	-681.
	6.9	-1.2	653	374	10.6	-3.3			
20.000							10.8	-2.0	-385.
	8.9	-1.2	639	443	13.9	-2.6			
25.000							1.9	-.9	22.
	10.1	-.9	630	455	16.1	-2.0			
30.000							-8.2	.0	484.
	9.5	-.6	656	364	14.5	-1.6			
35.000							-17.7	.6	899.
	5.8	-.0	655	237	8.9	-.1			
40.000							-23.5	.6	1144.
	1.9	-.1	658	180	2.9	-.4			
45.000							-25.4	.7	1220.
	-1.3	-.1	683	139	-1.9	-1.0			
50.000							-24.1	.9	1163.
	-4.0	.1	719	105	-5.6	.5			
55.000							-20.1	.8	998.
	-5.3	.3	759	78	-7.0	3.8			
60.000							-14.8	.5	758.
	-5.3	.3	801	56	-6.6	4.7			
65.000							-9.5	.2	493.
	-5.9	.1	478	35	-12.4	3.1			
70.000							-3.6	.1	181.
	-3.6	.1	154	13	-23.1	10.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 100 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							27.2	-.0	-1228.
	2.7	.0	579	213	4.7	.1			
5.000							24.5	-.1	-1087.
	3.5	-.1	594	243	5.9	-.4			
10.000							21.0	.0	-924.
	4.5	-.3	612	291	7.4	-.9			
15.000							16.4	.3	-726.
	5.4	-.6	653	374	8.3	-1.6			
20.000							11.0	.9	-487.
	7.2	-.9	639	443	11.3	-2.0			
25.000							3.8	1.8	-124.
	9.1	-.7	630	455	14.4	-1.5			
30.000							-5.3	2.5	318.
	9.5	.0	656	364	14.5	.1			
35.000							-14.8	2.4	739.
	5.8	.3	655	237	8.9	1.4			
40.000							-20.6	2.1	992.
	2.3	.2	658	180	3.5	1.4			
45.000							-22.9	1.8	1093.
	-1.0	.1	683	139	-1.4	.9			
50.000							-22.0	1.7	1056.
	-3.7	.3	719	105	-5.2	3.0			
55.000							-18.3	1.4	907.
	-5.1	.6	759	78	-6.7	7.8			
60.000							-13.1	.8	678.
	-4.9	.6	801	56	-6.2	10.4			
65.000							-8.2	.2	429.
	-5.2	.1	478	35	-10.8	2.7			
70.000							-3.0	.1	156.
	-3.0	.1	154	13	-19.7	8.9			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 110 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							28.7	8.4	-1548.
	1.1	.6	579	213	1.9	2.8			
5.000							27.6	7.8	-1455.
	2.5	.7	594	243	4.3	2.8			
10.000							25.0	7.1	-1315.
	4.0	.6	612	291	6.6	2.1			
15.000							21.0	6.5	-1118.
	4.8	.5	653	374	7.3	1.4			
20.000							16.2	6.0	-880.
	6.3	.3	639	443	9.8	.6			
25.000							10.0	5.7	-523.
	8.5	.4	630	455	13.5	1.0			
30.000							1.4	5.3	-71.
	10.3	1.2	656	364	15.7	3.4			
35.000							-8.8	4.0	399.
	7.0	.9	655	237	10.8	3.6			
40.000							-15.9	3.2	727.
	3.6	.6	658	180	5.4	3.5			
45.000							-19.4	2.5	900.
	.0	.4	683	139	.1	2.8			
50.000							-19.5	2.2	919.
	-3.0	.5	719	105	-4.2	5.1			
55.000							-16.4	1.6	809.
	-4.4	.7	759	78	-5.8	9.1			
60.000							-12.0	.9	615.
	-4.6	.7	801	56	-5.7	12.8			
65.000							-7.4	.2	387.
	-4.7	.1	478	35	-9.9	2.7			
70.000							-2.7	.1	137.
	-2.7	.1	154	13	-17.3	7.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 120 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							31.0	19.0	-2009.
	.1	1.2	579	213	.1	5.5			
5.000							30.9	17.8	-1940.
	2.1	1.6	594	243	3.5	6.6			
10.000							28.9	16.2	-1795.
	4.2	1.7	612	291	6.9	5.8			
15.000							24.7	14.5	-1559.
	5.3	2.0	653	374	8.1	5.4			
20.000							19.4	12.5	-1262.
	5.9	2.1	639	443	9.2	4.8			
25.000							13.5	10.4	-888.
	7.8	2.4	630	455	12.5	5.2			
30.000							5.7	8.0	-434.
	10.3	2.8	656	364	15.7	7.8			
35.000							-4.6	5.2	67.
	7.6	1.6	655	237	11.6	6.9			
40.000							-12.2	3.5	453.
	4.4	1.0	658	180	6.6	5.4			
45.000							-16.5	2.6	691.
	1.0	.6	683	139	1.4	4.0			
50.000							-17.5	2.0	774.
	-2.0	.6	719	105	-2.8	5.9			
55.000							-15.5	1.4	721.
	-3.8	.6	759	78	-5.0	8.0			
60.000							-11.7	.8	573.
	-4.6	.6	801	56	-5.7	10.2			
65.000							-7.1	.2	367.
	-4.7	.1	478	35	-9.8	3.1			
70.000							-2.5	.1	126.
	-2.5	.1	154	13	-15.9	5.7			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 130 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							31.5	30.8	-2411.
	.9	1.5	579	213	1.6	6.9			
5.000							30.5	29.4	-2289.
	2.5	2.4	594	243	4.1	9.9			
10.000							28.1	27.0	-2111.
	4.4	2.8	612	291	7.3	9.6			
15.000							23.6	24.2	-1841.
	5.6	3.4	653	374	8.5	9.2			
20.000							18.0	20.7	-1501.
	4.9	4.4	639	443	7.6	9.9			
25.000							13.2	16.4	-1142.
	6.2	4.9	630	455	9.8	10.7			
30.000							7.0	11.5	-734.
	9.0	4.7	656	364	13.7	12.9			
35.000							-2.0	6.8	-256.
	7.2	2.6	655	237	11.0	11.0			
40.000							-9.2	4.2	154.
	4.9	1.5	658	180	7.4	8.2			
45.000							-14.0	2.7	453.
	1.9	.8	683	139	2.8	5.8			
50.000							-15.9	1.9	614.
	-1.0	.8	719	105	-1.5	7.6			
55.000							-14.9	1.1	635.
	-2.9	.5	759	78	-3.8	6.6			
60.000							-12.0	.6	555.
	-4.3	.4	801	56	-5.4	7.2			
65.000							-7.7	.2	389.
	-5.1	.1	478	35	-10.6	3.7			
70.000							-2.6	.1	135.
	-2.6	.1	154	13	-17.0	5.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 140 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							30.6	38.2	-2646.
	1.8	1.7	579	213	3.2	8.1			
5.000							28.7	36.5	-2472.
	2.3	2.9	594	243	3.8	12.0			
10.000							26.4	33.6	-2286.
	3.8	3.5	612	291	6.1	11.9			
15.000							22.7	30.1	-2030.
	4.5	4.4	653	374	6.9	11.7			
20.000							18.2	25.8	-1716.
	2.5	6.0	639	443	4.0	13.5			
25.000							15.6	19.8	-1444.
	3.5	6.5	630	455	5.6	14.2			
30.000							12.1	13.3	-1144.
	7.1	5.4	656	364	10.9	15.0			
35.000							5.0	7.9	-737.
	6.4	2.9	655	237	9.7	12.0			
40.000							-1.4	5.0	-345.
	5.4	1.7	658	180	8.2	9.7			
45.000							-6.7	3.3	-5.
	2.9	1.0	683	139	4.3	7.5			
50.000							-9.7	2.2	221.
	.1	1.1	719	105	.2	10.5			
55.000							-9.8	1.1	316.
	-1.6	.6	759	78	-2.1	7.5			
60.000							-8.2	.6	320.
	-3.5	.4	801	56	-4.3	7.9			
65.000							-4.7	.1	227.
	-3.3	.1	478	35	-6.9	3.9			
70.000							-1.4	-.0	74.
	-1.4	-.0	154	13	-8.9	-1.0			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 150 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							13.8	43.1	-2204.
	1.1	2.2	579	213	1.9	10.4			
5.000							12.7	40.9	-2048.
	.7	3.3	594	243	1.1	13.7			
10.000							12.0	37.6	-1911.
	1.6	3.8	612	291	2.6	13.2			
15.000							10.4	33.7	-1723.
	2.0	5.0	653	374	3.1	13.4			
20.000							8.4	28.7	-1487.
	-.9	7.1	639	443	-1.4	16.0			
25.000							9.3	21.6	-1340.
	-.4	7.6	630	455	-.6	16.6			
30.000							9.6	14.0	-1193.
	3.6	5.7	656	364	5.4	15.7			
35.000							6.1	8.3	-923.
	4.1	2.9	655	237	6.3	12.4			
40.000							1.9	5.4	-615.
	4.0	1.8	658	180	6.1	10.0			
45.000							-2.1	3.6	-317.
	2.7	1.2	683	139	4.0	8.9			
50.000							-4.8	2.4	-81.
	.9	1.3	719	105	1.2	12.5			
55.000							-5.7	1.1	70.
	-.4	.6	759	78	-.6	7.5			
60.000							-5.3	.5	150.
	-2.3	.4	801	56	-2.9	6.9			
65.000							-2.9	.1	133.
	-2.2	.1	478	35	-4.5	3.7			
70.000							-.8	-.0	43.
	-.8	-.0	154	13	-4.9	-3.6			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 160 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-7.4	48.3	-1586.
	.2	2.7	579	213	.4	12.9			
5.000							-7.6	45.5	-1449.
	-1.0	3.8	594	243	-1.8	15.6			
10.000							-6.5	41.7	-1365.
	-.6	4.4	612	291	-.9	15.0			
15.000							-5.9	37.4	-1248.
	-.5	5.7	653	374	-.7	15.3			
20.000							-5.5	31.6	-1089.
	-4.1	8.2	639	443	-6.4	18.5			
25.000							-1.3	23.5	-1050.
	-3.8	8.6	630	455	-6.0	19.0			
30.000							2.4	14.8	-1024.
	.8	6.1	656	364	1.2	16.9			
35.000							1.6	8.7	-855.
	2.1	3.0	655	237	3.2	12.7			
40.000							-.4	5.7	-618.
	2.5	1.9	658	180	3.7	10.3			
45.000							-2.9	3.8	-373.
	1.8	1.4	683	139	2.6	9.9			
50.000							-4.7	2.4	-160.
	.5	1.5	719	105	.6	14.1			
55.000							-5.2	1.0	-11.
	-.4	.6	759	78	-.6	7.5			
60.000							-4.7	.4	92.
	-2.1	.3	801	56	-2.7	5.4			
65.000							-2.6	.1	111.
	-2.0	.1	478	35	-4.1	4.0			
70.000							-.6	-.1	38.
	-.6	-.1	154	13	-4.0	-4.8			
75.600							0.0	0.0	0.

TABLE 7 SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 170 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-17.0	50.7	-1306.
	-.2	2.8	579	213	-.3	13.4			
5.000							-16.8	47.9	-1185.
	-1.7	4.0	594	243	-2.8	16.6			
10.000							-15.2	43.9	-1122.
	-1.4	4.7	612	291	-2.3	16.1			
15.000							-13.8	39.2	-1034.
	-1.8	6.1	653	374	-2.8	16.3			
20.000							-11.9	33.1	-922.
	-5.9	8.8	639	443	-9.2	19.9			
25.000							-6.1	24.3	-949.
	-5.7	9.2	630	455	-9.0	20.2			
30.000							-.4	15.1	-1000.
	-.7	6.2	656	364	-1.1	17.1			
35.000							.3	8.8	-889.
	.9	3.0	655	237	1.4	12.4			
40.000							-.6	5.9	-696.
	1.6	1.8	658	180	2.4	10.2			
45.000							-2.2	4.0	-482.
	1.2	1.4	683	139	1.8	10.3			
50.000							-3.5	2.6	-287.
	.1	1.6	719	105	.2	15.6			
55.000							-3.6	1.0	-144.
	-.5	.6	759	78	-.6	8.2			
60.000							-3.1	.3	-24.
	-2.0	.3	801	56	-2.4	5.4			
65.000							-1.2	.0	30.
	-1.1	.2	478	35	-2.3	4.5			
70.000							-.0	-.1	10.
	-.0	-.1	154	13	-.3	-8.8			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 180 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-19.4	52.2	-1334.
	-.2	2.9	579	213	-.3	13.5			
5.000							-19.2	49.4	-1210.
	-1.9	4.2	594	243	-3.2	17.1			
10.000							-17.3	45.2	-1157.
	-1.8	4.9	612	291	-3.0	16.7			
15.000							-15.4	40.3	-1084.
	-2.3	6.3	653	374	-3.6	16.9			
20.000							-13.1	34.0	-984.
	-6.5	9.2	639	443	-10.2	20.8			
25.000							-6.6	24.8	-1030.
	-6.3	9.5	630	455	-10.0	20.9			
30.000							-.3	15.3	-1100.
	-1.1	6.2	656	364	-1.7	17.0			
35.000							.8	9.1	-1000.
	.6	2.9	655	237	1.0	12.3			
40.000							.2	6.2	-817.
	1.4	1.8	658	180	2.1	10.1			
45.000							-1.2	4.3	-608.
	1.0	1.5	683	139	1.4	10.8			
50.000							-2.2	2.8	-421.
	-.1	1.7	719	105	-.2	16.5			
55.000							-2.1	1.1	-286.
	-.6	.7	759	78	-.7	9.3			
60.000							-1.5	.4	-152.
	-1.9	.4	801	56	-2.4	6.7			
65.000							.4	-.0	-62.
	-.1	.2	478	35	-.3	5.8			
70.000							.6	-.2	-21.
	.6	-.2	154	13	3.8	-15.0			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 190 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-17.0	50.7	-1306.
	-.2	2.8	579	213	-.3	13.4			
5.000							-16.8	47.9	-1185.
	-1.7	4.0	594	243	-2.8	16.6			
10.000							-15.2	43.9	-1122.
	-1.4	4.7	612	291	-2.3	16.1			
15.000							-13.8	39.2	-1034.
	-1.8	6.1	653	374	-2.8	16.3			
20.000							-11.9	33.1	-922.
	-5.9	8.8	639	443	-9.2	19.9			
25.000							-6.1	24.3	-949.
	-5.7	9.2	630	455	-9.0	20.2			
30.000							-.4	15.1	-1000.
	-.7	6.2	656	364	-1.1	17.1			
35.000							.3	8.8	-889.
	.9	3.0	655	237	1.4	12.4			
40.000							-.6	5.9	-696.
	1.6	1.8	658	180	2.4	10.2			
45.000							-2.2	4.0	-482.
	1.2	1.4	683	139	1.8	10.3			
50.000							-3.5	2.6	-287.
	.1	1.6	719	105	.2	15.6			
55.000							-3.6	1.0	-144.
	-.5	.6	759	78	-.6	8.2			
60.000							-3.1	.3	-24.
	-2.0	.3	801	56	-2.4	5.4			
65.000							-1.2	.0	30.
	-1.1	.2	478	35	-2.3	4.5			
70.000							-.0	-.1	10.
	-.0	-.1	154	13	-.3	-8.8			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 200 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-7.4	48.3	-1586.
	.2	2.7	579	213	.4	12.9			
5.000							-7.6	45.5	-1449.
	-1.0	3.8	594	243	-1.8	15.6			
10.000							-6.5	41.7	-1365.
	-.6	4.4	612	291	-.9	15.0			
15.000							-5.9	37.4	-1248.
	-.5	5.7	653	374	-.7	15.3			
20.000							-5.5	31.6	-1089.
	-4.1	8.2	639	443	-6.4	18.5			
25.000							-1.3	23.5	-1050.
	-3.8	8.6	630	455	-6.0	19.0			
30.000							2.4	14.8	-1024.
	.8	6.1	656	364	1.2	16.9			
35.000							1.6	8.7	-855.
	2.1	3.0	655	237	3.2	12.7			
40.000							-.4	5.7	-618.
	2.5	1.9	658	180	3.7	10.3			
45.000							-2.9	3.8	-373.
	1.8	1.4	683	139	2.6	9.9			
50.000							-4.7	2.4	-160.
	.5	1.5	719	105	.6	14.1			
55.000							-5.2	1.0	-11.
	-.4	.6	759	78	-.6	7.5			
60.000							-4.7	.4	92.
	-2.1	.3	801	56	-2.7	5.4			
65.000							-2.6	.1	111.
	-2.0	.1	478	35	-4.1	4.0			
70.000							-.6	-.1	38.
	-.6	-.1	154	13	-4.0	-4.8			
75.600							0.0	0.0	0.

TABLE 7 SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 210 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							13.8	43.1	-2204.
	1.1	2.2	579	213	1.9	10.4			
5.000							12.7	40.9	-2048.
	.7	3.3	594	243	1.1	13.7			
10.000							12.0	37.6	-1911.
	1.6	3.8	612	291	2.6	13.2			
15.000							10.4	33.7	-1723.
	2.0	5.0	653	374	3.1	13.4			
20.000							8.4	28.7	-1487.
	-.9	7.1	639	443	-1.4	16.0			
25.000							9.3	21.6	-1340.
	-.4	7.6	630	455	-.6	16.6			
30.000							9.6	14.0	-1193.
	3.6	5.7	656	364	5.4	15.7			
35.000							6.1	8.3	-923.
	4.1	2.9	655	237	6.3	12.4			
40.000							1.9	5.4	-615.
	4.0	1.8	658	180	6.1	10.0			
45.000							-2.1	3.6	-317.
	2.7	1.2	683	139	4.0	8.9			
50.000							-4.8	2.4	-81.
	.9	1.3	719	105	1.2	12.5			
55.000							-5.7	1.1	70.
	-.4	.6	759	78	-.6	7.5			
60.000							-5.3	.5	150.
	-2.3	.4	801	56	-2.9	6.9			
65.000							-2.9	.1	133.
	-2.2	.1	478	35	-4.5	3.7			
70.000							-.8	-.0	43.
	-.8	-.0	154	13	-4.9	-3.6			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 220 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							30.6	38.2	-2646.
	1.8	1.7	579	213	3.2	8.1			
5.000							28.7	36.5	-2472.
	2.3	2.9	594	243	3.8	12.0			
10.000							26.4	33.6	-2286.
	3.8	3.5	612	291	6.1	11.9			
15.000							22.7	30.1	-2030.
	4.5	4.4	653	374	6.9	11.7			
20.000							18.2	25.8	-1716.
	2.5	6.0	639	443	4.0	13.5			
25.000							15.6	19.8	-1444.
	3.5	6.5	630	455	5.6	14.2			
30.000							12.1	13.3	-1144.
	7.1	5.4	656	364	10.9	15.0			
35.000							5.0	7.9	-737.
	6.4	2.9	655	237	9.7	12.0			
40.000							-1.4	5.0	-345.
	5.4	1.7	658	180	8.2	9.7			
45.000							-6.7	3.3	-5.
	2.9	1.0	683	139	4.3	7.5			
50.000							-9.7	2.2	221.
	.1	1.1	719	105	.2	10.5			
55.000							-9.8	1.1	316.
	-1.6	.6	759	78	-2.1	7.5			
60.000							-8.2	.6	320.
	-3.5	.4	801	56	-4.3	7.9			
65.000							-4.7	.1	227.
	-3.3	.1	478	35	-6.9	3.9			
70.000							-1.4	-.0	74.
	-1.4	-.0	154	13	-8.9	-1.0			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 230 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							31.5	30.8	-2411.
	.9	1.5	579	213	1.6	6.9			
5.000							30.5	29.4	-2289.
	2.5	2.4	594	243	4.1	9.9			
10.000							28.1	27.0	-2111.
	4.4	2.8	612	291	7.3	9.6			
15.000							23.6	24.2	-1841.
	5.6	3.4	653	374	8.5	9.2			
20.000							18.0	20.7	-1501.
	4.9	4.4	639	443	7.6	9.9			
25.000							13.2	16.4	-1142.
	6.2	4.9	630	455	9.8	10.7			
30.000							7.0	11.5	-734.
	9.0	4.7	656	364	13.7	12.9			
35.000							-2.0	6.8	-256.
	7.2	2.6	655	237	11.0	11.0			
40.000							-9.2	4.2	154.
	4.9	1.5	658	180	7.4	8.2			
45.000							-14.0	2.7	453.
	1.9	.8	683	139	2.8	5.8			
50.000							-15.9	1.9	614.
	-1.0	.8	719	105	-1.5	7.6			
55.000							-14.9	1.1	635.
	-2.9	.5	759	78	-3.8	6.6			
60.000							-12.0	.6	555.
	-4.3	.4	801	56	-5.4	7.2			
65.000							-7.7	.2	389.
	-5.1	.1	478	35	-10.6	3.7			
70.000							-2.6	.1	135.
	-2.6	.1	154	13	-17.0	5.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 240 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							31.0	19.0	-2009.
	.1	1.2	579	213	.1	5.5			
5.000							30.9	17.8	-1940.
	2.1	1.6	594	243	3.5	6.6			
10.000							28.9	16.2	-1795.
	4.2	1.7	612	291	6.9	5.8			
15.000							24.7	14.5	-1559.
	5.3	2.0	653	374	8.1	5.4			
20.000							19.4	12.5	-1262.
	5.9	2.1	639	443	9.2	4.8			
25.000							13.5	10.4	-888.
	7.8	2.4	630	455	12.5	5.2			
30.000							5.7	8.0	-434.
	10.3	2.8	656	364	15.7	7.8			
35.000							-4.6	5.2	67.
	7.6	1.6	655	237	11.6	6.9			
40.000							-12.2	3.5	453.
	4.4	1.0	658	180	6.6	5.4			
45.000							-16.5	2.6	691.
	1.0	.6	683	139	1.4	4.0			
50.000							-17.5	2.0	774.
	-2.0	.6	719	105	-2.8	5.9			
55.000							-15.5	1.4	721.
	-3.8	.6	759	78	-5.0	8.0			
60.000							-11.7	.8	573.
	-4.6	.6	801	56	-5.7	10.2			
65.000							-7.1	.2	367.
	-4.7	.1	478	35	-9.8	3.1			
70.000							-2.5	.1	126.
	-2.5	.1	154	13	-15.9	5.7			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 250 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							28.7	8.4	-1548.
	1.1	.6	579	213	1.9	2.8			
5.000							27.6	7.8	-1455.
	2.5	.7	594	243	4.3	2.8			
10.000							25.0	7.1	-1315.
	4.0	.6	612	291	6.6	2.1			
15.000							21.0	6.5	-1118.
	4.8	.5	653	374	7.3	1.4			
20.000							16.2	6.0	-880.
	6.3	.3	639	443	9.8	.6			
25.000							10.0	5.7	-523.
	8.5	.4	630	455	13.5	1.0			
30.000							1.4	5.3	-71.
	10.3	1.2	656	364	15.7	3.4			
35.000							-8.8	4.0	399.
	7.0	.9	655	237	10.8	3.6			
40.000							-15.9	3.2	727.
	3.6	.6	658	180	5.4	3.5			
45.000							-19.4	2.5	900.
	.0	.4	683	139	.1	2.8			
50.000							-19.5	2.2	919.
	-3.0	.5	719	105	-4.2	5.1			
55.000							-16.4	1.6	809.
	-4.4	.7	759	78	-5.8	9.1			
60.000							-12.0	.9	615.
	-4.6	.7	801	56	-5.7	12.8			
65.000							-7.4	.2	387.
	-4.7	.1	478	35	-9.9	2.7			
70.000							-2.7	.1	137.
	-2.7	.1	154	13	-17.3	7.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 260 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							27.2	-.0	-1228.
	2.7	.0	579	213	4.7	.1			
5.000							24.5	-.1	-1087.
	3.5	-.1	594	243	5.9	-.4			
10.000							21.0	.0	-924.
	4.5	-.3	612	291	7.4	-.9			
15.000							16.4	.3	-726.
	5.4	-.6	653	374	8.3	-1.6			
20.000							11.0	.9	-487.
	7.2	-.9	639	443	11.3	-2.0			
25.000							3.8	1.8	-124.
	9.1	-.7	630	455	14.4	-1.5			
30.000							-5.3	2.5	318.
	9.5	.0	656	364	14.5	.1			
35.000							-14.8	2.4	739.
	5.8	.3	655	237	8.9	1.4			
40.000							-20.6	2.1	992.
	2.3	.2	658	100	3.5	1.4			
45.000							-22.9	1.8	1093.
	-1.0	.1	683	139	-1.4	.9			
50.000							-22.0	1.7	1056.
	-3.7	.3	719	105	-5.2	3.0			
55.000							-18.3	1.4	907.
	-5.1	.6	759	78	-6.7	7.8			
60.000							-13.1	.8	678.
	-4.9	.6	801	56	-6.2	10.4			
65.000							-8.2	.2	429.
	-5.2	.1	478	35	-10.8	2.7			
70.000							-3.0	.1	156.
	-3.0	.1	154	13	-19.7	8.9			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 270 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							31.6	-5.1	-1291.
	4.0	-.2	579	213	6.8	-1.1			
5.000							27.6	-4.8	-1108.
	4.4	-.6	594	243	7.5	-2.7			
10.000							23.2	-4.2	-912.
	5.5	-.9	612	291	8.9	-3.1			
15.000							17.7	-3.3	-681.
	6.9	-1.2	653	374	10.6	-3.3			
20.000							10.8	-2.0	-385.
	8.9	-1.2	639	443	13.9	-2.6			
25.000							1.9	-.9	22.
	10.1	-.9	630	455	16.1	-2.0			
30.000							-8.2	.0	484.
	9.5	-.6	656	364	14.5	-1.6			
35.000							-17.7	.6	899.
	5.8	-.0	655	237	8.9	-.1			
40.000							-23.5	.6	1144
	1.9	-.1	658	180	2.9	-.4			
45.000							-25.4	.7	1220.
	-1.3	-.1	683	139	-1.9	-1.0			
50.000							-24.1	.9	1163.
	-4.0	.1	719	105	-5.6	.5			
55.000							-20.1	.8	998.
	-5.3	.3	759	78	-7.0	3.8			
60.000							-14.8	.5	758.
	-5.3	.3	801	56	-6.6	4.7			
65.000							-9.5	.2	493.
	-5.9	.1	478	35	-12.4	3.1			
70.000							-3.6	.1	181.
	-3.6	.1	154	13	-23.1	10.4			
75.000							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 280 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							44.5	-8.5	-1893.
	4.9	-.4	579	213	8.5	-2.0			
5.000							39.6	-8.1	-1671.
	5.1	-1.0	594	243	8.5	-4.2			
10.000							34.5	-7.0	-1450.
	6.1	-1.3	612	291	10.0	-4.5			
15.000							28.4	-5.7	-1193.
	7.9	-1.7	653	374	12.0	-4.7			
20.000							20.5	-4.0	-853.
	9.8	-1.4	639	443	15.4	-3.1			
25.000							10.7	-2.6	-413.
	10.9	-.9	630	455	17.3	-2.0			
30.000							-.3	-1.7	76.
	10.6	-1.0	656	364	16.1	-2.7			
35.000							-10.8	-.8	539.
	7.3	-.4	655	237	11.1	-1.7			
40.000							-18.1	-.4	850.
	3.1	-.5	658	180	4.7	-2.5			
45.000							-21.2	.1	982.
	-.0	-.3	683	139	-.0	-2.3			
50.000							-21.2	.4	986.
	-2.7	-.0	719	105	-3.7	-.2			
55.000							-18.5	.4	887.
	-4.4	.1	759	78	-5.8	1.3			
60.000							-14.1	.3	699.
	-5.0	.1	801	56	-6.2	1.9			
65.000							-9.1	.2	468.
	-5.7	.1	478	35	-11.9	3.5			
70.000							-3.4	.1	174.
	-3.4	.1	154	13	-22.1	8.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 290 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							64.2	-13.8	-2685.
	4.8	-.9	579	213	8.3	-4.4			
5.000							59.3	-12.9	-2492.
	5.2	-1.6	594	243	8.8	-6.4			
10.000							54.1	-11.3	-2285.
	6.7	-1.8	612	291	11.0	-6.1			
15.000							47.4	-9.6	-2021.
	9.0	-2.5	653	374	13.8	-6.7			
20.000							38.3	-7.1	-1642.
	10.7	-2.0	639	443	16.8	-4.4			
25.000							27.6	-5.1	-1177.
	11.9	-1.4	630	455	18.8	-3.1			
30.000							15.8	-3.7	-660.
	11.9	-1.7	656	364	18.1	-4.7			
35.000							3.9	-2.0	-148.
	9.2	-1.0	655	237	14.0	-4.0			
40.000							-5.3	-1.0	239.
	5.0	-.8	658	180	7.5	-4.3			
45.000							-10.3	-.2	451.
	2.1	-.5	683	139	3.1	-3.3			
50.000							-12.4	.2	554.
	-.1	.0	719	105	-.2	.2			
55.000							-12.3	.2	580.
	-2.2	.0	759	78	-2.8	.1			
60.000							-10.1	.2	497.
	-2.9	-.0	801	56	-3.7	-.2			
65.000							-7.2	.2	366.
	-4.3	.1	478	35	-9.1	2.8			
70.000							-2.8	.1	143.
	-2.8	.1	154	13	-18.4	7.1			
75.000							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 300 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							84.7	-21.4	-3361.
	4.9	-1.3	579	213	8.4	-6.2			
5.000							79.8	-20.0	-3182.
	5.8	-2.0	594	243	9.8	-8.1			
10.000							74.0	-18.1	-2966.
	8.1	-2.3	612	291	13.3	-7.8			
15.000							65.8	-15.8	-2660.
	11.0	-3.4	653	374	16.8	-9.2			
20.000							54.9	-12.4	-2208.
	11.7	-3.2	639	443	18.3	-7.2			
25.000							43.2	-9.2	-1709.
	12.6	-2.8	630	455	20.0	-6.1			
30.000							30.5	-6.4	-1170.
	13.2	-2.8	656	364	20.2	-7.8			
35.000							17.3	-3.6	-617.
	11.1	-1.7	655	237	16.9	-7.2			
40.000							6.2	-1.9	-173.
	7.3	-1.2	658	180	11.1	-6.5			
45.000							-1.1	-.7	119.
	4.4	-.6	683	139	6.4	-4.6			
50.000							-5.5	-.0	300.
	1.8	-.0	719	105	2.5	-.4			
55.000							-7.3	-.0	388.
	-.5	-.1	759	78	-.7	-1.2			
60.000							-6.8	.1	356.
	-1.6	-.1	801	56	-1.9	-1.0			
65.000							-5.2	.1	267.
	-3.1	.1	478	35	-6.6	1.6			
70.000							-2.1	.1	102.
	-2.1	.1	154	13	-13.5	6.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 310 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							105.5	-30.0	-3968.
	6.5	-1.7	579	213	11.2	-8.0			
5.000							99.0	-28.3	-3724.
	7.3	-2.2	594	243	12.3	-9.0			
10.000							91.7	-26.1	-3455.
	10.0	-2.6	612	291	16.4	-8.8			
15.000							81.6	-23.5	-3084.
	13.3	-4.3	653	374	20.4	-11.4			
20.000							68.3	-19.3	-2548.
	12.5	-4.7	639	443	19.6	-10.6			
25.000							55.8	-14.6	-2030.
	12.9	-4.8	630	455	20.5	-10.5			
30.000							42.9	-9.8	-1497.
	14.2	-4.3	656	364	21.6	-11.9			
35.000							28.7	-5.5	-935.
	12.5	-2.6	655	237	19.0	-11.2			
40.000							16.3	-2.8	-463.
	9.1	-1.7	658	180	13.9	-9.4			
45.000							7.1	-1.1	-124.
	6.4	-.8	683	139	9.3	-5.7			
50.000							.8	-.3	110.
	3.6	-.1	719	105	5.1	-1.1			
55.000							-2.9	-.2	246.
	1.3	-.2	759	78	1.7	-2.4			
60.000							-4.1	-.0	264.
	-.5	-.1	801	56	-.6	-1.9			
65.000							-3.7	.1	196.
	-2.3	-.0	478	35	-4.8	-.0			
70.000							-1.4	.1	66.
	-1.4	.1	154	13	-9.1	7.2			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 320 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							123.0	-37.7	-4454.
	8.2	-2.2	579	213	14.2	-10.2			
5.000							114.8	-35.5	-4148.
	9.0	-2.6	594	243	15.2	-10.9			
10.000							105.8	-32.8	-3821.
	11.8	-3.0	612	291	19.3	-10.3			
15.000							94.0	-29.8	-3395.
	14.6	-5.0	653	374	22.4	-13.4			
20.000							79.4	-24.8	-2821.
	12.3	-6.1	639	443	19.3	-13.8			
25.000							67.1	-18.7	-2327.
	12.2	-6.4	630	455	19.4	-14.0			
30.000							54.8	-12.3	-1841.
	14.3	-5.2	656	364	21.9	-14.3			
35.000							40.5	-7.1	-1299.
	13.3	-3.4	655	237	20.3	-14.2			
40.000							27.2	-3.8	-817.
	10.7	-2.0	658	180	16.2	-11.0			
45.000							16.5	-1.8	-432.
	8.3	-1.0	683	139	12.2	-7.4			
50.000							8.2	-.8	-138.
	5.6	-.3	719	105	7.8	-2.5			
55.000							2.6	-.5	55.
	3.3	-.3	759	78	4.4	-4.4			
60.000							-.7	-.2	136.
	1.4	-.2	801	56	1.7	-3.7			
65.000							-2.1	.1	122.
	-1.3	-.1	478	35	-2.6	-1.9			
70.000							-.9	.1	36.
	-.9	.1	154	13	-5.7	9.3			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 330 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							130.5	-44.0	-4567.
	9.9	-2.7	579	213	17.1	-12.7			
5.000							120.6	-41.3	-4206.
	10.1	-3.0	594	243	17.1	-12.4			
10.000							110.5	-38.3	-3847.
	12.5	-3.3	612	291	20.5	-11.4			
15.000							97.9	-35.0	-3405.
	14.7	-5.6	653	374	22.5	-15.0			
20.000							83.2	-29.4	-2841.
	11.3	-7.4	639	443	17.7	-16.8			
25.000							71.8	-21.9	-2400.
	11.0	-7.7	630	455	17.5	-17.0			
30.000							60.8	-14.2	-1981.
	14.0	-5.6	656	364	21.4	-15.3			
35.000							46.8	-8.6	-1471.
	13.4	-3.7	655	237	20.4	-15.7			
40.000							33.4	-4.9	-1003.
	11.6	-2.3	658	180	17.6	-12.9			
45.000							21.8	-2.6	-595.
	9.5	-1.4	683	139	13.9	-10.0			
50.000							12.4	-1.2	-272.
	6.6	-.5	719	105	9.2	-4.7			
55.000							5.8	-.7	-62.
	4.4	-.4	759	78	5.8	-5.7			
60.000							1.4	-.3	48.
	2.2	-.3	801	56	2.7	-5.1			
65.000							-.8	.0	56.
	-.5	-.1	478	35	-1.0	-2.9			
70.000							-.3	.1	6.
	-.3	.1	154	13	-2.0	9.2			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 340 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							125.4	-46.8	-4124.
	10.5	-3.1	579	213	18.2	-14.7			
5.000							114.9	-43.7	-3750.
	10.2	-3.3	594	243	17.2	-13.7			
10.000							104.7	-40.3	-3407.
	11.8	-3.5	612	291	19.2	-12.1			
15.000							92.9	-36.8	-3021.
	12.9	-5.9	653	374	19.8	-15.7			
20.000							80.0	-30.9	-2567.
	9.4	-8.0	639	443	14.8	-18.0			
25.000							70.5	-22.9	-2239.
	9.2	-8.2	630	455	14.6	-18.0			
30.000							61.3	-14.7	-1922.
	12.7	-5.6	656	364	19.4	-15.3			
35.000							48.6	-9.1	-1482.
	12.2	-3.8	655	237	18.7	-16.2			
40.000							36.4	-5.3	-1073.
	11.4	-2.4	658	180	17.3	-13.5			
45.000							25.0	-2.9	-688.
	9.5	-1.5	683	139	14.0	-10.6			
50.000							15.5	-1.4	-378.
	6.9	-.6	719	105	9.6	-5.5			
55.000							8.6	-.8	-176.
	4.7	-.5	759	78	6.3	-6.5			
60.000							3.9	-.3	-66.
	2.4	-.3	801	56	3.0	-4.9			
65.000							1.5	-.0	-59.
	.8	-.1	478	35	1.6	-3.7			
70.000							.7	.1	-46.
	.7	.1	154	13	4.5	6.3			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 350 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							114.0	-46.8	-3430.
	9.7	-3.4	579	213	16.8	-15.8			
5.000							104.2	-43.4	-3101.
	9.3	-3.5	594	243	15.7	-14.3			
10.000							94.9	-39.9	-2809.
	10.4	-3.6	612	291	17.1	-12.5			
15.000							84.5	-36.3	-2498
	11.0	-5.7	653	374	16.9	-15.3			
20.000							73.4	-30.6	-2144.
	7.7	-7.9	639	443	12.0	-17.9			
25.000							65.8	-22.7	-1917.
	7.5	-8.4	630	455	12.0	-18.4			
30.000							58.2	-14.3	-1690.
	11.1	-5.7	656	364	16.9	-15.5			
35.000							47.1	-8.6	-1334.
	10.8	-3.8	655	237	16.4	-16.0			
40.000							36.4	-4.8	-998.
	10.4	-2.2	658	180	15.8	-12.2			
45.000							26.0	-2.6	-664.
	8.7	-1.3	683	139	12.8	-9.6			
50.000							17.2	-1.3	-399.
	6.1	-.5	719	105	8.4	-4.9			
55.000							11.2	-.8	-242.
	4.5	-.4	759	78	6.0	-5.7			
60.000							6.7	-.3	-162.
	2.9	-.2	801	56	3.6	-3.7			
65.000							3.8	-.1	-167.
	2.2	-.2	478	35	4.6	-5.4			
70.000							1.6	.1	-91.
	1.6	.1	154	13	10.2	6.1			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 0 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-54.4	0.0	0.
	-4.0	0.0	295	409	-13.5	0.0			
5.000							-50.4	0.0	0.
	-11.5	0.0	693	623	-16.5	0.0			
10.000							-39.0	0.0	0.
	-16.7	0.0	816	539	-20.4	0.0			
15.000							-22.3	0.0	0.
	-12.6	0.0	767	555	-16.5	0.0			
20.000							-9.7	0.0	0.
	-6.1	0.0	480	442	-12.7	0.0			
25.000							-3.6	0.0	0.
	-3.6	0.0	176	173	-20.4	0.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 10 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-53.6	1.0	105.
	-3.4	-1.3	295	409	-11.7	-3.3			
5.000							-50.2	2.3	124.
	-11.6	.5	693	623	-16.8	.8			
10.000							-38.6	1.8	92.
	-16.6	.7	816	539	-20.3	1.2			
15.000							-22.0	1.1	72.
	-12.6	.5	767	555	-16.4	1.0			
20.000							-9.4	.6	55.
	-6.0	1.0	480	442	-12.4	2.2			
25.000							-3.5	-.3	-8.
	-3.5	-.3	176	173	-19.7	-2.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 20 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-51.9	5.3	314.
5.000	-2.7	-.9	295	409	-9.3	-2.1	-49.2	6.2	302.
10.000	-11.1	1.8	693	623	-16.0	2.9	-38.1	4.4	212.
15.000	-15.7	1.5	816	539	-19.3	2.7	-22.3	2.9	174.
20.000	-12.7	1.4	767	555	-16.6	2.5	-9.6	1.5	118.
25.000	-6.2	2.0	480	442	-13.0	4.6	-3.4	-.5	-9.
28.320	-3.4	-.5	176	173	-19.0	-2.8	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 30 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-47.9	11.9	619.
	-2.2	-.0	295	409	-7.4	-.0			
5.000							-45.7	11.9	552.
	-9.8	3.3	693	623	-14.2	5.3			
10.000							-35.9	8.6	385.
	-14.2	2.6	816	539	-17.4	4.8			
15.000							-21.7	6.0	316.
	-12.4	2.6	767	555	-16.2	4.6			
20.000							-9.3	3.5	224.
	-6.3	3.3	480	442	-13.2	7.4			
25.000							-3.0	.2	29.
	-3.0	.2	176	173	-16.9	1.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 40 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-40.2	19.3	948.
	-1.9	.9	295	409	-6.4	2.3			
5.000							-38.3	18.4	832.
	-8.5	4.9	693	623	-12.2	7.8			
10.000							-29.9	13.5	577.
	-11.9	4.1	816	539	-14.6	7.6			
15.000							-18.0	9.4	446.
	-10.6	3.9	767	555	-13.8	7.1			
20.000							-7.4	5.5	292.
	-5.3	4.2	480	442	-11.0	9.6			
25.000							-2.1	1.2	64.
	-2.1	1.2	176	173	-12.2	7.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 50 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-31.3	28.2	1384.
	-1.4	2.4	295	409	-4.7	5.8			
5.000							-30.0	25.9	1212.
	-6.8	7.5	693	623	-9.8	12.0			
10.000							-23.2	18.4	835.
	-9.2	6.0	816	539	-11.3	11.2			
15.000							-14.0	12.4	592.
	-8.4	5.3	767	555	-11.0	9.6			
20.000							-5.6	7.1	356.
	-4.3	4.7	480	442	-8.9	10.7			
25.000							-1.3	2.4	106.
	-1.3	2.4	176	173	-7.3	13.6			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 60 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-21.0	32.5	1564.
5.000	-.9	3.2	295	409	-3.0	7.9	-20.1	29.3	1360.
10.000	-4.9	8.4	693	623	-7.0	13.5	-15.2	20.9	952.
15.000	-6.0	6.4	816	339	-7.4	11.9	-9.2	14.5	680.
20.000	-6.2	6.1	767	555	-8.1	11.0	-3.0	8.4	385.
25.000	-2.8	5.2	480	442	-5.9	11.7	-.1	3.2	128.
28.320	-.1	3.2	176	173	-.7	18.6	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 70 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-12.8	34.7	1662.
	-.7	3.6	295	409	-2.3	8.9			
5.000							-12.1	31.1	1448.
	-3.5	8.7	693	623	-5.1	14.0			
10.000							-8.6	22.4	1039.
	-3.3	6.7	816	539	-4.1	12.3			
15.000							-5.2	15.7	751.
	-3.8	6.6	767	555	-4.9	11.9			
20.000							-1.5	9.1	419.
	-1.7	5.4	480	442	-3.5	12.3			
25.000							.2	3.7	150.
	.2	3.7	176	173	1.1	21.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 80 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-7.9	34.3	1592.
5.000	-.6	4.5	295	409	-1.9	10.9	-7.4	29.8	1361.
10.000	-3.0	8.8	693	623	-4.4	14.1	-4.3	21.0	975.
15.000	-1.5	6.2	816	539	-1.8	11.5	-2.8	14.8	718.
20.000	-2.0	6.4	767	555	-2.6	11.5	-.8	8.4	383.
25.000	-1.0	5.0	480	442	-2.0	11.2	.1	3.4	134.
28.320	.1	3.4	176	173	.7	19.9	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 90 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-4.5	35.0	1506.
	-.0	5.8	295	409	-.1	14.3			
5.000							-4.5	29.2	1243.
	-2.3	9.4	693	623	-3.3	15.1			
10.000							-2.2	19.8	867.
	-.8	6.2	816	539	-1.0	11.5			
15.000							-1.3	13.6	640.
	-.9	6.0	767	555	-1.1	10.8			
20.000							-.5	7.6	334.
	-.6	4.6	480	442	-1.3	10.5			
25.000							.1	2.9	110.
	.1	2.9	176	173	.8	17.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 100 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							1.4	36.7	1432.
	1.4	6.2	295	409	4.8	15.1			
5.000							-.0	30.5	1164.
	-.3	9.8	693	623	-.4	15.7			
10.000							.3	20.7	809.
	.2	6.6	816	539	.3	12.2			
15.000							.1	14.1	605.
	.5	6.3	767	555	.6	11.4			
20.000							-.4	7.8	312.
	-.2	4.8	480	442	-.3	10.8			
25.000							-.3	3.0	104.
	-.3	3.0	176	173	-1.5	17.3			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 110 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							10.8	36.9	1232.
	2.4	5.9	295	409	8.0	14.4			
5.000							8.4	31.0	1005.
	2.5	9.7	693	623	3.6	15.5			
10.000							5.9	21.3	702.
	2.5	6.9	816	539	3.0	12.8			
15.000							3.5	14.5	533.
	2.4	6.5	767	555	3.1	11.7			
20.000							1.1	8.0	283.
	1.3	5.0	480	442	2.6	11.3			
25.000							-.2	3.0	97.
	-.2	3.0	176	173	-.9	17.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 120 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							21.9	34.2	993.
	3.0	5.6	295	409	10.2	13.7			
5.000							19.0	28.6	792.
	5.5	9.3	693	623	7.9	14.9			
10.000							13.5	19.3	534.
	5.6	6.3	816	539	6.8	11.7			
15.000							7.9	13.0	417.
	4.3	5.8	767	555	5.6	10.5			
20.000							3.6	7.2	236.
	3.1	4.6	480	442	6.5	10.4			
25.000							.5	2.6	82.
	.5	2.6	176	173	2.6	14.7			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 130 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							35.0	29.1	721.
	3.8	5.1	295	409	12.8	12.6			
5.000							31.2	24.0	541.
	8.3	8.2	693	623	12.0	13.2			
10.000							22.9	15.8	343.
	9.2	5.2	816	539	11.3	9.7			
15.000							13.7	10.5	293.
	7.1	4.7	767	555	9.3	8.4			
20.000							6.6	5.9	195.
	5.2	4.2	480	442	10.8	9.4			
25.000							1.4	1.7	56.
	1.4	1.7	176	173	7.8	9.8			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 140 CONFIGURATION A REFERENCE PRESSURE 17 0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							43.3	19.3	320.
	4.7	4.0	295	409	15.8	9.7			
5.000							38.6	15.3	197.
	10.1	5.8	693	623	14.6	9.2			
10.000							28.6	9.6	110.
	11.2	3.0	816	539	13.7	5.6			
15.000							17.4	6.6	159.
	8.6	2.7	767	555	11.2	4.9			
20.000							8.8	3.9	130.
	6.6	3.2	480	442	13.8	7.1			
25.000							2.2	.7	18.
	2.2	.7	176	173	12.3	4.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 150 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							49.6	10.9	45.
	5.4	2.6	295	409	18.3	6.2			
5.000							44.2	8.3	-17.
	12.5	3.4	693	623	18.1	5.5			
10.000							31.7	4.9	-19.
	13.0	1.3	816	539	16.0	2.4			
15.000							18.7	3.6	67.
	9.2	1.2	767	555	11.9	2.2			
20.000							9.5	2.4	77.
	6.8	2.4	480	442	14.2	5.3			
25.000							2.7	.0	-8.
	2.7	.0	176	173	15.4	.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 160 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							56.0	6.3	-33.
	6.5	1.3	295	409	22.0	3.3			
5.000							49.5	4.9	-56.
	15.3	2.1	693	623	22.0	3.3			
10.000							34.3	2.9	-40.
	15.0	.9	816	539	18.4	1.7			
15.000							19.3	2.0	11.
	9.6	.8	767	555	12.5	1.4			
20.000							9.7	1.2	18.
	6.9	1.4	480	442	14.3	3.2			
25.000							2.8	-.2	-22.
	2.8	-.2	176	173	15.8	-1.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 170 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							59.3	2.3	-47.
	7.3	.4	295	409	24.8	1.1			
5.000							52.0	1.8	-52.
	16.7	.9	693	623	24.2	1.4			
10.000							35.3	.9	-32.
	15.5	.3	816	539	19.0	.5			
15.000							19.8	.7	-2.
	9.7	.2	767	555	12.6	.4			
20.000							10.1	.5	2.
	7.1	.6	480	442	14.9	1.3			
25.000							3.0	-.1	-13.
	3.0	-.1	176	173	16.9	-.6			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 180 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							60.5	0.0	0.
	8.0	0.0	295	409	27.0	0.0			
5.000							52.5	0.0	0.
	17.5	0.0	693	623	25.2	0.0			
10.000							35.0	0.0	0.
	15.7	0.0	816	539	19.2	0.0			
15.000							19.3	0.0	0.
	9.4	0.0	767	555	12.3	0.0			
20.000							9.9	0.0	0.
	7.0	0.0	480	442	14.5	0.0			
25.000							3.0	0.0	0.
	3.0	0.0	176	173	16.8	0.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 190 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							59.3	-2.3	47.
	7.3	-.4	295	409	24.8	-1.1			
5.000							52.0	-1.8	52.
	16.7	-.9	693	623	24.2	-1.4			
10.000							35.3	-.9	32.
	15.5	-.3	816	539	19.0	-.5			
15.000							19.8	-.7	2.
	9.7	-.2	767	555	12.6	-.4			
20.000							10.1	-.3	-2.
	7.1	-.6	480	442	14.9	-1.3			
25.000							3.0	.1	13.
	3.0	.1	176	173	16.9	.6			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 200 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							56.0	-6.3	33.
	6.5	-1.3	295	409	22.0	-3.3			
5.000							49.5	-4.9	56.
	15.3	-2.1	693	623	22.0	-3.3			
10.000							34.3	-2.9	40.
	15.0	-.9	816	539	18.4	-1.7			
15.000							19.3	-2.0	-11.
	9.6	-.8	767	555	12.5	-1.4			
20.000							9.7	-1.2	-18.
	6.9	-1.4	480	442	14.3	-3.2			
25.000							2.8	.2	22.
	2.8	.2	176	173	15.8	1.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 210 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							49.6	-10.9	-45.
	5.4	-2.6	295	409	18.3	-6.2			
5.000							44.2	-8.3	17.
	12.5	-3.4	693	623	18.1	-5.5			
10.000							31.7	-4.9	19.
	13.0	-1.3	816	539	16.0	-2.4			
15.000							18.7	-3.6	-67.
	9.2	-1.2	767	555	11.9	-2.2			
20.000							9.5	-2.4	-77.
	6.8	-2.4	480	442	14.2	-5.3			
25.000							2.7	-.0	8.
	2.7	-.0	176	173	15.4	-.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 220 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							43.3	-19.3	-320.
	4.7	-4.0	295	409	15.8	-9.7			
5.000							38.6	-15.3	-197.
	10.1	-5.8	693	623	14.6	-9.2			
10.000							28.6	-9.6	-110.
	11.2	-3.0	816	539	13.7	-5.6			
15.000							17.4	-6.6	-159.
	8.6	-2.7	767	555	11.2	-4.9			
20.000							8.8	-3.9	-130.
	6.6	-3.2	480	442	13.8	-7.1			
25.000							2.2	-.7	-18.
	2.2	-.7	176	173	12.3	-4.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 230 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							35.0	-29.1	-721.
	3.8	-5.1	295	409	12.8	-12.6			
5.000							31.2	-24.0	-541.
	8.3	-8.2	693	623	12.0	-13.2			
10.000							22.9	-15.8	-343.
	9.2	-5.2	816	539	11.3	-9.7			
15.000							13.7	-10.5	-293.
	7.1	-4.7	767	555	9.3	-8.4			
20.000							6.6	-5.9	-195.
	5.2	-4.2	480	442	10.8	-9.4			
25.000							1.4	-1.7	-56.
	1.4	-1.7	176	173	7.8	-9.8			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 240 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							21.9	-34.2	-993.
	3.0	-5.6	295	409	10.2	-13.7			
5.000							19.0	-28.6	-792.
	5.5	-9.3	693	623	7.9	-14.9			
10.000							13.5	-19.3	-534.
	5.6	-6.3	816	539	6.8	-11.7			
15.000							7.9	-13.0	-417.
	4.3	-5.8	767	555	5.6	-10.5			
20.000							3.6	-7.2	-236.
	3.1	-4.6	480	442	6.5	-10.4			
25.000							.5	-2.6	-82.
	.5	-2.6	176	173	2.6	-14.7			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 250 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							10.8	-36.9	-1232.
	2.4	-5.9	295	409	8.0	-14.4			
5.000							8.4	-31.0	-1005.
	2.5	-9.7	693	623	3.6	-15.5			
10.000							5.9	-21.3	-702.
	2.5	-6.9	816	539	3.0	-12.8			
15.000							3.5	-14.5	-533.
	2.4	-6.5	767	555	3.1	-11.7			
20.000							1.1	-8.0	-283.
	1.3	-5.0	480	442	2.6	-11.3			
25.000							-.2	-3.0	-97.
	-.2	-3.0	176	173	-.9	-17.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 260 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							1.4	-36.7	-1432.
5.000	1.4	-6.2	295	409	4.8	-15.1	-.0	-30.5	-1164.
10.000	-.3	-9.8	693	623	-.4	-15.7	.3	-20.7	-809.
15.000	.2	-6.6	816	539	.3	-12.2	.1	-14.1	-605.
20.000	.5	-6.3	767	555	.6	-11.4	-.4	-7.8	-312.
25.000	-.2	-4.8	480	442	-.3	-10.8	-.3	-3.0	-104.
28.320	-.3	-3.0	176	173	-1.5	-17.3	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 270 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-4.5	-35.0	-1506.
	-.0	-5.8	295	409	-.1	-14.3			
5.000							-4.5	-29.2	-1243.
	-2.3	-9.4	693	623	-3.3	-15.1			
10.000							-2.2	-19.8	-867.
	-.8	-6.2	816	539	-1.0	-11.5			
15.000							-1.3	-13.6	-640.
	-.9	-6.0	767	555	-1.1	-10.8			
20.000							-.5	-7.6	-334.
	-.6	-4.6	480	442	-1.3	-10.5			
25.000							.1	-2.9	-110.
	.1	-2.9	176	173	.8	-17.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 280 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-7.9	-34.3	-1592.
5.000	-.6	-4.5	295	409	-1.9	-10.9	-7.4	-29.8	-1361.
10.000	-3.0	-8.8	693	623	-4.4	-14.1	-4.3	-21.0	-975.
15.000	-1.5	-6.2	816	539	-1.8	-11.5	-2.8	-14.8	-718.
20.000	-2.0	-6.4	767	555	-2.6	-11.5	-.8	-8.4	-383.
25.000	-1.0	-5.0	480	442	-2.0	-11.2	.1	-3.4	-134.
28.320	.1	-3.4	176	173	.7	-19.9	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 290 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-12.8	-34.7	-1662.
	-.7	-3.6	295	409	-2.3	-8.9			
5.000							-12.1	-31.1	-1448.
	-3.5	-8.7	693	623	-5.1	-14.0			
10.000							-8.6	-22.4	-1039.
	-3.3	-6.7	816	539	-4.1	-12.3			
15.000							-5.2	-15.7	-751.
	-3.8	-6.6	767	555	-4.9	-11.9			
20.000							-1.5	-9.1	-419.
	-1.7	-5.4	480	442	-3.5	-12.3			
25.000							.2	-3.7	-150.
	.2	-3.7	176	173	1.1	-21.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 300 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-21.0	-32.5	-1564.
	-.9	-3.2	295	409	-3.0	-7.9			
5.000							-20.1	-29.3	-1360.
	-4.9	-8.4	693	623	-7.0	-13.5			
10.000							-15.2	-20.9	-952.
	-6.0	-6.4	816	539	-7.4	-11.9			
15.000							-9.2	-14.5	-680.
	-6.2	-6.1	767	555	-8.1	-11.0			
20.000							-3.0	-8.4	-385.
	-2.8	-5.2	480	442	-5.9	-11.7			
25.000							-.1	-3.2	-128.
	-.1	-3.2	176	173	-.7	-18.6			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 310 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-31.3	-28.2	-1384.
	-1.4	-2.4	295	409	-4.7	-5.8			
5.000							-30.0	-25.9	-1212.
	-6.8	-7.5	693	623	-9.8	-12.0			
10.000							-23.2	-18.4	-835.
	-9.2	-6.0	816	539	-11.3	-11.2			
15.000							-14.0	-12.4	-592.
	-8.4	-5.3	767	555	-11.0	-9.6			
20.000							-5.6	-7.1	-356.
	-4.3	-4.7	480	442	-8.9	-10.7			
25.000							-1.3	-2.4	-106.
	-1.3	-2.4	176	173	-7.3	-13.6			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 320 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-40.2	-19.3	-948.
	-1.9	-.9	295	409	-6.4	-2.3			
5.000							-38.3	-18.4	-832.
	-8.5	-4.9	693	623	-12.2	-7.8			
10.000							-29.9	-13.5	-577.
	-11.9	-4.1	816	539	-14.6	-7.6			
15.000							-18.0	-9.4	-446.
	-10.6	-3.9	767	555	-13.8	-7.1			
20.000							-7.4	-5.5	-292.
	-5.3	-4.2	480	442	-11.0	-9.6			
25.000							-2.1	-1.2	-64.
	-2.1	-1.2	176	173	-12.2	-7.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 330 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-47.9	-11.9	-619.
	-2.2	.0	295	409	-7.4	.0			
5.000							-45.7	-11.9	-552.
	-9.8	-3.3	693	623	-14.2	-5.3			
10.000							-35.9	-8.6	-385.
	-14.2	-2.6	816	539	-17.4	-4.8			
15.000							-21.7	-6.0	-316.
	-12.4	-2.6	767	555	-16.2	-4.6			
20.000							-9.3	-3.5	-224.
	-6.3	-3.3	480	442	-13.2	-7.4			
25.000							-3.0	-.2	-29.
	-3.0	-.2	176	173	-16.9	-1.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 340 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-51.9	-5.3	-314.
	-2.7	.9	295	409	-9.3	2.1			
5.000							-49.2	-6.2	-302.
	-11.1	-1.8	693	623	-16.0	-2.9			
10.000							-38.1	-4.4	-212.
	-15.7	-1.5	816	539	-19.3	-2.7			
15.000							-22.3	-2.9	-174.
	-12.7	-1.4	767	355	-16.6	-2.5			
20.000							-9.6	-1.5	-118.
	-6.2	-2.0	480	442	-13.0	-4.6			
25.000							-3.4	.5	9.
	-3.4	.5	176	173	-19.0	2.8			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- NO WALL
WIND DIRECTION 350 CONFIGURATION A REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-53.6	-1.0	-105.
	-3.4	1.3	295	409	-11.7	3.3			
5.000							-50.2	-2.3	-124.
	-11.6	-.5	693	623	-16.8	-.8			
10.000							-38.6	-1.8	-92.
	-16.6	-.7	816	539	-20.3	-1.2			
15.000							-22.0	-1.1	-72.
	-12.6	-.5	767	555	-16.4	-1.0			
20.000							-9.4	-.6	-55.
	-6.0	-1.0	480	442	-12.4	-2.2			
25.000							-3.5	.3	8.
	-3.5	.3	176	173	-19.7	2.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 0 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							259.3	0.0	0.
	-1.0	0.0	87	10	-11.3	0.0			
5.000							260.2	0.0	0.
	6.0	0.0	270	29	22.3	0.0			
10.000							254.2	0.0	0.
	19.8	0.0	628	51	31.6	0.0			
15.000							234.4	0.0	0.
	22.1	0.0	663	87	33.3	0.0			
20.000							212.3	0.0	0.
	24.5	0.0	647	128	37.8	0.0			
25.000							187.8	0.0	0.
	28.9	0.0	645	177	44.8	0.0			
30.000							158.9	0.0	0.
	31.8	0.0	651	230	48.8	0.0			
35.000							127.1	0.0	0.
	33.5	0.0	663	325	50.5	0.0			
40.000							93.7	0.0	0.
	32.0	0.0	651	369	49.1	0.0			
45.000							61.7	0.0	0.
	28.1	0.0	662	367	42.5	0.0			
50.000							33.6	0.0	0.
	19.6	0.0	655	305	30.0	0.0			
55.000							14.0	0.0	0.
	12.3	0.0	641	223	19.2	0.0			
60.000							1.7	0.0	0.
	6.5	0.0	637	169	10.2	0.0			
65.000							-4.8	0.0	0.
	1.5	0.0	640	117	2.3	0.0			
70.000							-6.3	0.0	0.
	-.5	0.0	445	74	-1.1	0.0			
75.000							-5.8	0.0	0.
	-.5	0.0	254	40	-2.0	0.0			
80.000							-5.3	0.0	0.
	-1.6	0.0	172	23	-9.6	0.0			
85.000							-3.6	0.0	0.
	-2.2	0.0	100	14	-21.6	0.0			
90.000							-1.5	0.0	0.
	-1.5	0.0	29	0	-51.7	0.0			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 10 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							259.8	2.7	-16.
	-.4	-.1	87	10	-4.2	-10.1			
5.000							260.2	2.8	41.
	6.1	-.4	270	29	22.6	-12.9			
10.000							254.1	3.2	153.
	19.5	-.5	628	51	31.0	-9.0			
15.000							234.6	3.6	282.
	22.0	-.3	663	87	33.2	-3.2			
20.000							212.6	3.9	370.
	24.2	-.4	647	128	37.4	-3.1			
25.000							188.4	4.3	439.
	27.9	-.6	645	177	43.3	-3.4			
30.000							160.5	4.9	488.
	31.1	-.5	651	230	47.7	-2.0			
35.000							129.4	5.4	522.
	32.8	-.3	663	325	49.5	-.8			
40.000							96.6	5.6	530.
	30.7	.0	651	369	47.1	.1			
45.000							65.9	5.6	490.
	27.3	1.0	662	367	41.2	2.8			
50.000							38.6	4.6	447.
	19.7	1.6	655	305	30.1	5.3			
55.000							18.9	2.9	406.
	12.8	1.1	641	223	20.0	4.8			
60.000							6.1	1.9	335.
	7.1	.8	637	169	11.2	4.9			
65.000							-1.1	1.0	252.
	1.9	.6	640	117	3.0	4.9			
70.000							-3.0	.5	165.
	-.3	.3	445	74	-.6	4.5			
75.000							-2.7	.1	77.
	-.5	.2	254	40	-1.9	3.9			
80.000							-2.2	-.0	23.
	-1.1	.0	172	23	-6.4	.5			
85.000							-1.1	-.0	-8.
	-.9	-.0	100	14	-8.6	-2.1			
90.000							-.2	.0	-4.
	-.2	-.0	29	0	-8.6	-3.9			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 20 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							254.5	6.2	276.
	.1	-.1	87	10	1.7	-10.4			
5.000							254.3	6.3	324.
	5.7	-.4	270	29	21.0	-12.7			
10.000							248.7	6.7	441.
	17.9	-.5	628	51	28.5	-10.5			
15.000							230.7	7.2	599.
	20.9	-.4	663	87	31.6	-5.1			
20.000							209.8	7.7	728.
	23.5	-.6	647	128	36.3	-5.0			
25.000							186.3	8.3	842.
	27.1	-1.1	645	177	42.1	-6.1			
30.000							159.2	9.4	943.
	30.4	-.9	651	230	46.6	-3.8			
35.000							128.8	10.2	1018.
	31.8	-.6	663	325	47.9	-1.9			
40.000							97.0	10.9	1047.
	28.3	.0	651	369	43.4	.1			
45.000							68.8	10.8	1006.
	25.2	1.9	662	367	38.0	5.3			
50.000							43.6	8.9	949.
	18.8	3.1	655	305	28.7	10.1			
55.000							24.8	5.8	867.
	12.8	2.1	641	223	20.0	9.2			
60.000							12.0	3.8	728.
	7.8	1.6	637	169	12.2	9.2			
65.000							4.2	2.2	564.
	3.0	1.1	640	117	4.7	9.6			
70.000							1.2	1.1	386.
	.6	.7	445	74	1.3	9.8			
75.000							.6	.4	211.
	.2	.4	254	40	.7	9.1			
80.000							.4	-.0	98.
	-.3	.0	172	23	-1.8	1.9			
85.000							.7	-.0	28.
	.2	-.0	100	14	1.6	-3.6			
90.000							.5	-.0	9.
	.5	-.0	29	0	18.6	-2.9			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 30 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							240.6	12.1	704.
	.3	-.1	87	10	3.2	-10.6			
5.000							240.3	12.2	818.
	5.3	-.3	270	29	19.5	-11.3			
10.000							235.0	12.5	927.
	16.2	-.6	628	51	25.9	-11.0			
15.000							218.8	13.1	1087.
	19.1	-.5	663	87	28.8	-5.8			
20.000							199.7	13.6	1226.
	21.3	-.7	647	128	32.9	-5.5			
25.000							178.4	14.3	1350.
	25.1	-.9	645	177	39.0	-5.4			
30.000							153.3	15.2	1460.
	29.0	-.9	651	230	44.5	-4.0			
35.000							124.3	16.2	1544.
	30.4	-.6	663	325	45.9	-1.8			
40.000							93.9	16.7	1584.
	25.8	.7	651	369	39.5	1.8			
45.000							68.1	16.1	1537.
	22.8	3.1	662	367	34.5	8.5			
50.000							45.3	13.0	1461.
	17.5	4.4	655	305	26.8	14.3			
55.000							27.7	8.6	1335.
	12.5	2.9	641	223	19.5	13.1			
60.000							15.2	5.7	1130.
	8.0	2.2	637	169	12.6	13.3			
65.000							7.2	3.5	886.
	3.8	1.7	640	117	6.0	14.4			
70.000							3.4	1.8	611.
	1.3	1.1	445	74	3.0	15.1			
75.000							2.1	.7	343.
	.7	.6	254	40	2.6	14.5			
80.000							1.4	.1	167.
	.1	.1	172	23	.8	4.6			
85.000							1.3	-.0	57.
	.5	-.0	100	14	5.1	-2.8			
90.000							.8	.0	15.
	.8	-.0	29	0	26.8	-2.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 40 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							218.2	17.0	1058.
	.1	-.1	87	10	1.0	-13.6			
5.000							218.1	17.2	1096.
	5.2	-.4	270	29	19.2	-15.2			
10.000							212.9	17.6	1235.
	15.3	-.7	628	51	24.4	-13.5			
15.000							197.6	18.3	1444.
	17.4	-.6	663	87	26.2	-6.7			
20.000							180.2	18.9	1617.
	19.2	-.8	647	128	29.6	-6.1			
25.000							161.0	19.7	1765.
	22.6	-1.0	645	177	35.0	-5.7			
30.000							138.5	20.7	1892.
	26.3	-.9	651	230	40.3	-3.7			
35.000							112.2	21.5	1989.
	27.5	-.3	663	325	41.4	-1.0			
40.000							84.7	21.9	2031.
	21.9	1.6	651	369	33.6	4.4			
45.000							62.9	20.2	1971.
	19.3	4.3	662	367	29.1	11.0			
50.000							43.6	15.9	1871.
	15.2	5.2	655	305	23.2	17.2			
55.000							28.4	10.7	1711.
	11.5	3.6	641	223	18.0	16.0			
60.000							16.8	7.1	1458.
	8.0	2.7	637	169	12.6	16.3			
65.000							8.8	4.3	1158.
	4.3	2.0	640	117	6.8	17.1			
70.000							4.5	2.3	826.
	1.7	1.4	445	74	3.8	18.9			
75.000							2.8	.9	502.
	1.0	.8	254	40	3.8	19.1			
80.000							1.8	.2	274.
	.4	.2	172	23	2.3	7.7			
85.000							1.5	-.0	118.
	.7	-.0	100	14	6.5	-.9			
90.000							.8	.0	37.
	.6	-.0	29	0	28.0	-2.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 50 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							190.1	20.1	1326.
	.1	-.2	87	10	.8	-18.4			
5.000							190.0	20.2	1350.
	5.1	-.6	270	29	18.9	-20.3			
10.000							184.9	20.8	1502.
	14.2	-.8	628	51	22.5	-15.0			
15.000							170.8	21.6	1742.
	15.4	-.6	663	87	23.2	-6.4			
20.000							155.4	22.2	1925.
	16.8	-.7	647	128	25.9	-5.7			
25.000							138.6	22.9	2076.
	19.7	-.9	645	177	30.5	-5.0			
30.000							118.9	23.8	2201.
	22.8	-.6	651	230	35.1	-2.7			
35.000							96.1	24.4	2277.
	23.3	-.1	663	325	35.2	-.4			
40.000							72.8	24.5	2278.
	16.8	2.5	651	369	25.8	6.7			
45.000							56.0	22.1	2182.
	14.6	5.0	662	367	22.0	13.6			
50.000							41.4	17.1	2048.
	12.2	5.5	655	305	18.6	18.2			
55.000							29.2	11.5	1853.
	10.2	3.8	641	223	15.9	17.3			
60.000							19.1	7.7	1574.
	7.9	2.9	637	169	12.4	17.2			
65.000							11.2	4.8	1253.
	5.3	2.1	640	117	8.3	18.1			
70.000							5.8	2.6	901.
	2.7	1.5	445	74	6.0	21.0			
75.000							3.2	1.1	552.
	1.3	.9	254	40	5.0	21.5			
80.000							1.9	.2	297.
	.6	.2	172	23	3.3	9.3			
85.000							1.3	.0	120.
	.7	.0	100	14	6.6	.0			
90.000							.7	.0	33.
	.7	-.0	29	0	24.0	-1.9			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 60 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							154.6	24.1	1741.
	.1	-.2	87	10	1.6	-18.6			
5.000							154.5	24.2	1732.
	4.4	-.5	270	29	16.2	-18.4			
10.000							150.1	24.8	1847.
	11.7	-.6	628	51	18.7	-12.4			
15.000							138.4	25.4	2048.
	12.8	-.4	663	87	19.3	-5.0			
20.000							125.6	25.8	2199.
	13.9	-.5	647	128	21.5	-3.6			
25.000							111.7	26.3	2320.
	15.9	-.4	645	177	24.6	-2.5			
30.000							95.8	26.7	2410.
	18.6	-.0	651	230	28.5	-.0			
35.000							77.2	26.8	2442.
	18.6	.7	663	325	28.1	2.1			
40.000							58.6	26.1	2389.
	12.0	3.6	651	369	18.5	9.9			
45.000							46.5	22.4	2246.
	10.3	5.7	662	367	15.5	15.5			
50.000							36.2	16.7	2076.
	9.4	5.5	655	305	14.4	18.1			
55.000							26.8	11.2	1862.
	8.6	3.7	641	223	13.4	16.7			
60.000							18.3	7.5	1579.
	7.2	2.8	637	169	11.3	16.3			
65.000							11.1	4.7	1253.
	5.6	2.1	640	117	8.7	18.3			
70.000							5.5	2.6	895.
	3.0	1.6	445	74	6.7	21.1			
75.000							2.5	1.0	545.
	1.2	.8	254	40	4.8	19.8			
80.000							1.3	.2	292.
	.6	.2	172	23	3.2	8.9			
85.000							.8	.0	117.
	.4	.0	100	14	3.7	.6			
90.000							.4	.0	32.
	.4	-.0	29	0	13.7	-.5			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 70 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							115.3	28.9	2445.
	-.1	-.1	87	10	-.7	-13.2			
5.000							115.3	29.1	2366.
	3.0	-.3	270	29	11.2	-9.3			
10.000							112.3	29.4	2384.
	8.2	-.3	628	51	13.1	-5.8			
15.000							104.1	29.6	2466.
	9.4	-.2	663	87	14.2	-2.2			
20.000							94.6	29.8	2526.
	10 4	-.0	647	128	16.0	-.1			
25.000							84.3	29.9	2568.
	11.7	.3	645	177	18.1	1.5			
30.000							72.6	29.6	2587.
	13.9	.9	651	230	21.4	4.0			
35.000							58.7	28.7	2542.
	14 0	2.0	663	325	21.1	6.1			
40.000							44.7	26.7	2428.
	7.6	5.0	651	369	11.6	13.5			
45.000							37.1	21.7	2232.
	6.4	6.2	662	367	9.7	16.9			
50.000							30 7	15.5	2024
	6 7	5.2	655	305	10.3	17.0			
55.000							24.0	10.3	1791.
	7 0	3.4	641	223	11.0	15.4			
60.000							17.0	6.9	1512.
	6.6	2.5	637	169	10.3	14.8			
65.000							10.4	4.4	1204.
	5.8	2.0	640	117	9.0	16.7			
70.000							4.6	2.4	874.
	3.0	1.5	445	74	6.8	20.2			
75.000							1.6	.9	556.
	1.0	.8	254	40	4.0	19.4			
80.000							.6	.1	324.
	.3	.2	172	23	1.9	7 3			
85.000							.3	-.0	162.
	.1	-.0	100	14	.7	-2.2			
90 000							.2	.0	58.
	2	.0	29	0	6.4	1.2			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 80 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-.2	-.1	87	10	-2.4	-7.4	75.1	32.2	3112.
5.000	1.6	-.0	270	29	5.9	-.5	75.3	32.3	3007.
10.000	5.0	.1	628	51	7.9	2.6	73.7	32.3	2937.
15.000	6.3	.2	663	87	9.5	2.5	68.7	32.1	2869.
20.000	7.1	.5	647	128	11.0	4.2	62.4	31.9	2802.
25.000	7.7	1.0	645	177	11.9	5.4	55.3	31.4	2736.
30.000	9.1	1.8	651	230	14.0	7.6	47.6	30.4	2669.
35.000	8.7	3.0	663	325	13.2	9.4	38.5	28.7	2557.
40.000	3.1	5.6	651	369	4.8	15.3	29.8	25.6	2394.
45.000	3.0	6.2	662	367	4.5	16.8	26.6	20.0	2132.
50.000	4.5	4.7	655	305	6.8	15.5	23.7	13.8	1876.
55.000	5.3	3.0	641	223	8.3	13.4	19.2	9.1	1628.
60.000	5.4	2.1	637	169	8.5	12.7	13.9	6.1	1364.
65.000	5.1	1.8	640	117	8.0	15.2	8.5	4.0	1085.
70.000	2.4	1.4	445	74	5.5	18.3	3.3	2.2	781.
75.000	.2	.7	254	40	.9	16.8	.9	.8	486.
80.000	-.0	.2	172	23	-.2	7.1	.7	.2	275.
85.000	.2	-.0	100	14	2.1	-.8	.7	-.0	132.
90.000	.5	-.0	29	0	16.7	-1.9	.5	.0	45.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 90 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							39.1	34.1	3743.
	-.9	.0	87	10	-10.7	4.5			
5.000							40.1	34.0	3609.
	.1	.3	270	29	.2	10.2			
10.000							40.0	33.7	3453.
	2.1	.5	628	51	3.3	10.6			
15.000							38.0	33.2	3222.
	3.4	.7	663	87	5.1	7.5			
20.000							34.6	32.6	3011.
	3.9	1.1	647	128	6.1	8.8			
25.000							30.6	31.4	2820.
	4.6	1.7	645	177	6.2	9.5			
30.000							26.6	29.7	2641.
	5.2	2.6	651	230	8.0	11.1			
35.000							21.4	27.2	2449.
	4.6	4.0	663	325	6.9	12.2			
40.000							16.9	23.2	2253.
	.2	5.7	651	369	.3	15.3			
45.000							16.6	17.5	1972.
	1.1	5.5	662	367	1.7	15.1			
50.000							15.5	12.0	1709.
	3.5	4.1	655	305	5.3	13.3			
55.000							12.0	8.0	1472.
	4.3	2.6	641	223	6.6	11.5			
60.000							7.8	5.4	1239.
	4.0	1.8	637	169	6.3	10.6			
65.000							3.8	3.6	1002.
	3.3	1.5	640	117	5.2	12.7			
70.000							.5	2.1	749.
	1.0	1.2	445	74	2.3	16.4			
75.000							-.6	.9	494.
	-.5	.6	254	40	-2.1	15.9			
80.000							-.0	.2	297.
	-.5	.2	172	23	-2.8	8.8			
85.000							.4	.0	152.
	.0	.0	100	14	.2	2.8			
90.000							.4	.0	52.
	.4	-.0	29	0	14.8	-10.0			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 100 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							14.0	36.4	3987.
	-1.5	.1	87	10	-17.1	8.9			
5.000							15.5	36.3	3856.
	-1.8	.4	270	29	-6.5	13.3			
10.000							17.3	35.9	3672.
	-1.8	.7	628	51	-2.8	14.6			
15.000							19.0	35.2	3367.
	-.2	1.1	663	87	-.3	12.4			
20.000							19.2	34.1	3065.
	.9	1.7	647	128	1.3	13.4			
25.000							18.4	32.4	2774.
	1.0	2.4	645	177	1.5	13.5			
30.000							17.4	30.0	2496.
	2.6	3.5	651	230	4.0	15.3			
35.000							14.8	26.5	2224.
	2.1	5.3	663	325	3.1	16.3			
40.000							12.7	21.2	1983.
	-.7	6.2	651	369	-1.1	16.8			
45.000							13.4	15.0	1688.
	1.3	5.2	662	367	2.0	14.3			
50.000							12.1	9.7	1417.
	4.2	3.4	655	305	6.3	11.1			
55.000							8.0	6.3	1187.
	4.2	2.1	641	223	6.5	9.2			
60.000							3.8	4.3	990.
	3.3	1.3	637	169	5.2	7.9			
65.000							.5	2.9	809.
	2.1	1.1	640	117	3.3	9.3			
70.000							-1.7	1.8	628.
	.1	1.0	445	74	.1	13.4			
75.000							-1.7	.9	441.
	-.9	.6	254	40	-3.7	14.3			
80.000							-.8	.3	277.
	-.8	.2	172	23	-4.6	9.2			
85.000							-.0	.1	152.
	-.2	.1	100	14	-2.3	4.6			
90.000							.2	0	52.
94.480	.2	-.0	29	0	7.6	-13.9	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 110 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-2.7	36.8	4073.
	-1.6	.1	87	10	-18.5	10.0			
5.000							-1.1	36.7	3965.
	-3.3	.4	270	29	-12.3	14.4			
10.000							2.2	36.3	3766.
	-6.1	1.0	628	51	-9.7	19.0			
15.000							8.3	35.3	3391.
	-4.5	1.5	663	87	-6.8	16.8			
20.000							12.8	33.8	3001.
	-2.8	2.2	647	128	-4.4	16.9			
25.000							15.6	31.7	2628.
	-2.0	3.1	645	177	-3.1	17.5			
30.000							17.7	28.6	2272.
	.2	4.3	651	230	.3	18.5			
35.000							17.4	24.3	1946.
	.7	6.0	663	325	1.0	18.6			
40.000							16.8	18.3	1673.
	-.5	6.2	651	369	-.8	16.9			
45.000							17.3	12.0	1370.
	2.3	4.6	662	367	3.5	12.7			
50.000							15.0	7.4	1095.
	5.4	2.7	655	305	8.2	8.8			
55.000							9.6	4.7	867.
	5.0	1.6	641	223	7.8	7.3			
60.000							4.6	3.1	690.
	3.8	1.0	637	169	5.9	5.9			
65.000							.8	2.1	543.
	2.1	.8	640	117	3.3	6.9			
70.000							-1.3	1.3	411.
	-.1	.7	445	74	-.2	9.8			
75.000							-1.2	.6	291.
	-1.0	.4	254	40	-3.9	9.6			
80.000							-.2	.2	183.
	-.6	.1	172	23	-3.5	6.1			
85.000							.4	.0	105.
	.0	.0	100	14	.3	2.8			
90.000							.4	.0	37.
	.4	-.0	29	0	13.5	-11.6			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 120 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-2.2	.1	87	10	-25.8	11.1	-10.1	33.8	4020.
5.000	-4.8	.5	270	29	-17.7	16.9	-7.8	33.7	3888.
10.000	-9.1	1.2	628	51	-14.5	23.2	-3.0	33.2	3646
15.000	-7.6	1.7	663	87	-11.5	19.6	6.1	32.0	3236.
20.000	-5.6	2.5	647	128	-8.6	19.1	13.7	30.3	2805.
25.000	-4.0	3.3	645	177	-6.1	18.8	19.3	27.9	2389.
30.000	-1.3	4.4	651	230	-2.0	19.0	23.2	24.6	1996.
35.000	-.0	6.0	663	325	-.0	18.5	24.5	20.2	1652.
40.000	.5	5.4	651	369	.8	14.6	24.5	14.2	1379.
45.000	3.8	3.5	662	367	5.7	9.6	24.0	8.8	1085.
50.000	6.7	1.8	655	305	10.2	5.9	20.2	5.2	833.
55.000	6.4	1.1	641	223	9.9	5.1	13.5	3.4	639.
60.000	4.9	.7	637	169	7.6	4.2	7.2	2.3	500.
65.000	2.8	.6	640	117	4.4	5.0	2.3	1.6	389.
70.000	.3	.6	445	74	.7	7.7	-.5	1.0	299.
75.000	-.8	.3	254	40	-3.1	7.7	-.8	.5	220.
80.000	-.4	.1	172	23	-2.6	4.8	-.1	.1	139.
85.000	.0	.0	100	14	.5	2.0	.4	.0	82.
90.000	.3	-.0	29	0	11.4	-8.9	.3	.0	29.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 130 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-3.4	26.6	3041.
5.000	-2.1	.1	87	10	-23.6	12.6	-1.3	26.4	2921.
10.000	-4.8	.4	270	29	-17.6	14.7	3.4	26.0	2714.
15.000	-9.3	1.0	628	51	-14.7	20.0	12.7	25.0	2394.
20.000	-8.3	1.5	663	87	-12.5	17.0	21.0	23.5	2039.
25.000	-6.2	2.1	647	128	-9.6	16.3	27.2	21.4	1688.
30.000	-4.2	3.0	645	177	-6.5	16.8	31.4	18.4	1355.
35.000	-1.8	3.9	651	230	-2.7	16.9	33.1	14.6	1071.
40.000	.3	5.2	663	325	.4	16.1	32.9	9.3	851.
45.000	1.8	4.0	651	369	2.7	10.7	31.1	5.4	608
50.000	4.9	2.3	662	367	7.4	6.3	26.2	3 0	413.
55.000	7.3	1.2	655	305	11.1	3.8	18.9	1.9	284.
60.000	7.1	.6	641	223	11.1	2.8	11.8	1.3	206.
65.000	5.8	.3	637	169	9.1	1.9	6.0	.9	157.
70.000	4.0	.3	640	117	6.3	2.4	2 0	.7	128.
75.000	1.3	.3	445	74	2.9	4.7	.7	.3	99.
80.000	-.4	.2	254	40	-1.4	5.4	1.1	.1	50.
85.000	-.0	.1	172	23	-.1	3.5	1.1	0	22.
90.000	.5	.0	100	14	4.8	1.3	.6	.0	3.
94.480	.6	-.0	29	0	21.8	-4.1	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 140 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-4.8	20.8	2513.
	-2.4	.1	87	10	-27.2	12.4			
5.000							-2.4	20.7	2396.
	-5.4	.4	270	29	-20.1	12.5			
10.000							3.0	20.4	2209.
	-11.0	.9	628	51	-17.5	17.2			
15.000							14.0	19.5	1928.
	-10.1	1.4	663	87	-15.3	16.3			
20.000							24.1	18.1	1605.
	-7.8	1.9	647	128	-12.0	15.2			
25.000							31.9	16 1	1282.
	-4.9	2.7	645	177	-7.5	15.5			
30.000							36.8	13.4	972.
	-2.1	3.5	651	230	-3.3	15.1			
35.000							38.9	9.9	720.
	.7	4.4	663	325	1.1	13.5			
40.000							38.2	5.5	539.
	3.3	2.5	651	369	5.1	6.9			
45 000							34.9	3.0	352.
	5.9	1.2	662	367	8.9	3.3			
50.000							28.9	1.7	213.
	7.5	.7	655	305	11.5	2.2			
55.000							21.4	1.1	126.
	7.5	.3	641	223	11.6	1.4			
60.000							13.9	.7	72.
	6.2	.1	637	169	9.7	.8			
65.000							7.8	.6	40.
	4.5	.1	640	117	7.1	1.1			
70.000							3.2	.5	26.
	1.7	.2	445	74	3.9	3.1			
75.000							1.5	.2	17.
	-.0	.2	254	40	-.0	3.9			
80.000							1.5	.1	-15.
	.2	.1	172	23	1.1	2.7			
85.000							1.3	.0	-24.
	.6	.0	100	14	6.2	1.3			
90.000							.7	.0	-18.
	.7	-.0	29	0	23.8	-2.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 150 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-10.2	14.9	1931.
5.000	-2.7	.1	87	10	-31.3	12.9	-7.5	14.7	1846.
10.000	-5.6	.3	270	29	-20.8	11.5	-1.8	14.4	1692.
15.000	-11.7	.7	628	51	-18.6	14.7	9.8	13.7	1441.
20.000	-11.3	1.2	663	87	-17.1	13.8	21.2	12.4	1171.
25.000	-8.9	1.6	647	128	-13.8	12.3	30.1	10.9	914.
30.000	-5.3	2.2	645	177	-8.2	12.3	35.4	8.7	675.
35.000	-2.4	2.7	651	230	-3.7	11.7	37.8	6.0	485.
40.000	1.0	3.3	663	325	1.5	10.0	36.8	2.7	356.
45.000	4.1	1.4	651	369	6.3	3.7	32.7	1.4	218.
50.000	5.9	.4	662	367	8.9	1.0	26.8	1.0	121.
55.000	6.5	.3	655	305	10.0	.9	20.3	.7	71.
60.000	6.6	.2	641	223	10.3	.8	13.7	.5	43.
65.000	5.8	.1	637	169	9.1	.5	7.9	.4	25.
70.000	4.8	.1	640	117	7.5	.7	3.1	.4	15.
75.000	2.4	.2	445	74	5.3	2.2	.7	.2	-3.
80.000	.4	.1	254	40	1.6	3.1	.3	.1	-35.
85.000	.1	.1	172	23	.5	2.5	.2	.0	-45.
90.000	.1	.0	100	14	1.4	1.6	.1	0	-26.
94.480	.1	-.0	29	0	3.3	-4.5	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 160 CONFIGURATION 8 REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-2.9	.1	87	10	-33.1	7.7	-10.5	9.6	1270.
5.000	-5.4	.2	270	29	-20.2	6.9	-7.6	9.6	1227.
10.000	-11.3	.5	628	51	-18.0	10.5	-2.2	9.4	1130.
15.000	-11.1	.9	663	87	-16.8	9.8	9.1	8.8	956.
20.000	-8.8	1.1	647	128	-13.6	8.4	20.3	8.0	767.
25.000	-4.7	1.5	645	177	-7.3	8.2	29.1	6.9	590.
30.000	-2.0	1.8	651	230	-3.0	7.9	33.8	5.4	428.
35.000	1.7	2.2	663	325	2.5	6.9	35.7	3.6	298.
40.000	4.2	.9	651	369	6.5	2.4	34.1	1.4	212.
45.000	5.5	.1	662	367	8.2	.3	29.8	.5	103.
50.000	5.7	.0	655	305	8.7	.1	24.4	.4	31.
55.000	5.8	.0	641	223	9.1	.0	18.7	.4	8.
60.000	5.2	.0	637	169	8.2	.0	12.9	.4	1.
65.000	4.4	.0	640	117	6.9	.3	7.7	.4	-4.
70.000	2.3	.1	445	74	5.2	1.7	3.2	.3	-8.
75.000	.4	.1	254	40	1.6	2.8	.9	.2	-27.
80.000	.1	.1	172	23	.7	2.5	.5	.1	-60.
85.000	.2	.0	100	14	2.2	1.8	.4	.0	-69.
90.000	.1	-.0	29	0	5.0	-3.0	.1	-.0	-38.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 170 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-12.1	4.9	604.
5.000	-2.5	.0	87	10	-28.7	3.2	-9.6	4.9	580.
10.000	-5.1	.1	270	29	-18.9	2.8	-4.5	4.8	540.
15.000	-11.4	.2	628	51	-18.2	4.2	6.9	4.6	478.
20.000	-11.3	.4	663	87	-17.1	4.1	18.3	4.2	398.
25.000	-9.0	.5	647	128	-13.9	4.0	27.3	3.7	316.
30.000	-4.7	.8	645	177	-7.3	4.3	32.0	3.0	238.
35.000	-1.5	.9	651	230	-2.3	3.9	33.4	2.1	172.
40.000	2.3	1.1	663	325	3.5	3.5	31.1	.9	125.
45.000	4.6	.6	651	369	7.1	1.6	26.5	.3	57.
50.000	5.2	.1	662	367	7.9	.4	21.2	.2	13.
55.000	4.9	-.0	655	305	7.5	-.0	16.3	.2	-2.
60.000	4.9	-.1	641	223	7.6	-.3	11.4	.3	-8.
65.000	4.3	-.0	637	169	6.8	-.2	7.1	.3	-11.
70.000	3.9	.0	640	117	6.0	.1	3.2	.3	-13.
75.000	2.2	.1	445	74	5.0	1.5	1.0	.2	-26.
80.000	.4	.1	254	40	1.5	2.5	.6	.1	-55.
85.000	.1	.1	172	23	.5	2.5	.5	.0	-63.
90.000	.3	.0	100	14	2.6	2.1	.3	-.0	-35.
94.480	.3	-.0	29	0	9.4	-2.1	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 180 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-11.4	0.0	0.
	-2.2	0.0	87	10	-25.0	0.0			
5.000							-9.2	0.0	0.
	-4.9	0.0	270	29	-18.0	0.0			
10.000							-4.3	0.0	0.
	-11.5	0.0	628	51	-18.3	0.0			
15.000							7.1	0.0	0.
	-11.4	0.0	663	87	-17.3	0.0			
20.000							18.6	0.0	0.
	-9.1	0.0	647	128	-14.0	0.0			
25.000							27.7	0.0	0.
	-4.6	0.0	645	177	-7.1	0.0			
30.000							32.2	0.0	0.
	-1.3	0.0	651	230	-2.0	0.0			
35.000							33.5	0.0	0.
	2.7	0.0	663	325	4.0	0.0			
40.000							30.9	0.0	0.
	4.8	0.0	651	369	7.4	0.0			
45.000							26.0	0.0	0.
	5.1	0.0	662	367	7.7	0.0			
50.000							20.9	0.0	0.
	4.6	0.0	655	305	7.0	0.0			
55.000							16.3	0.0	0.
	4.7	0.0	641	223	7.3	0.0			
60.000							11.6	0.0	0.
	4.3	0.0	637	169	6.7	0.0			
65.000							7.4	0.0	0.
	3.9	0.0	640	117	6.1	0.0			
70.000							3.5	0.0	0.
	2.4	0.0	445	74	5.5	0.0			
75.000							1.0	0.0	0.
	.6	0.0	254	40	2.4	0.0			
80.000							.4	0.0	0.
	.1	0.0	172	23	.7	0.0			
85.000							.3	0.0	0.
	.2	0.0	100	14	1.7	0.0			
90.000							.1	0.0	0.
	.1	0.0	29	0	5.0	0.0			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 190 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-12.1	-4.9	-604.
	-2.5	-.0	87	10	-28.7	-3.2			
5.000							-9.6	-4.9	-580.
	-5.1	-.1	270	29	-18.9	-2.8			
10.000							-4 5	-4.8	-540.
	-11.4	-.2	628	51	-18.2	-4.2			
15.000							6.9	-4.6	-478.
	-11.3	-.4	663	87	-17.1	-4.1			
20.000							18.3	-4.2	-398.
	-9.0	-.5	647	128	-13.9	-4.0			
25.000							27.3	-3.7	-316.
	-4.7	-.8	645	177	-7.3	-4.3			
30.000							32.0	-3.0	-238.
	-1.5	-.9	651	230	-2.3	-3.9			
35.000							33.4	-2.1	-172.
	2.3	-1.1	663	325	3.5	-3.5			
40.000							31.1	-.9	-125.
	4.6	-.6	651	369	7.1	-1.6			
45.000							26.5	-.3	-57.
	5.2	-.1	662	367	7.9	-.4			
50.000							21.2	-.2	-13.
	4.9	.0	655	305	7.5	.0			
55.000							16.3	-.2	2.
	4.9	.1	641	223	7.6	.3			
60.000							11.4	-.3	8.
	4.3	.0	637	169	6.8	.2			
65 000							7.1	-.3	11.
	3.9	-.0	640	117	6.0	-.1			
70 000							3.2	-.3	13.
	2.2	-.1	445	74	5.0	-1.5			
75.000							1.0	-.2	26.
	.4	-.1	254	40	1.5	-2.5			
80.000							.6	-.1	55.
	.1	-.1	172	23	.5	-2.5			
85.000							.5	-.0	63.
	.3	-.0	100	14	2.6	-2.1			
90 000							.3	.0	35.
	.3	.0	29	0	9.4	2.1			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 200 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-2.9	-.1	87	10	-33.1	-7.7	-10.5	-9.6	-1270.
5.000	-5.4	-.2	270	29	-20.2	-6.9	-7.6	-9.6	-1227.
10.000	-11.3	-.5	628	51	-18.0	-10.5	-2.2	-9.4	-1130.
15.000	-11.1	-.9	663	87	-16.8	-9.8	9.1	-8.8	-956.
20.000	-8.8	-1.1	647	128	-13.6	-8.4	20.3	-8.0	-767.
25.000	-4.7	-1.5	645	177	-7.3	-8.2	29.1	-6 9	-590.
30.000	-2.0	-1.8	651	230	-3.0	-7.9	33.8	-5.4	-428.
35.000	1.7	-2.2	663	325	2.5	-6.9	35.7	-3.6	-298.
40.000	4.2	-.9	651	369	6.5	-2.4	34.1	-1.4	-212.
45.000	5.5	-.1	662	367	8.2	-.3	29.8	-.5	-103.
50.000	5.7	-.0	655	305	8.7	-.1	24.4	-.4	-31.
55.000	5.8	-.0	641	223	9.1	-.0	18.7	-.4	-8.
60.000	5.2	-.0	637	169	8.2	-.0	12.9	-.4	-1.
65.000	4.4	-.0	640	117	6.9	-.3	7.7	-.4	4.
70.000	2.3	-.1	445	74	5.2	-1.7	3.2	-.3	8.
75.000	.4	-.1	254	40	1.6	-2.8	.9	-.2	27.
80.000	.1	-.1	172	23	.7	-2.5	.5	-.1	60.
85.000	.2	-.0	100	14	2.2	-1.8	.4	- 0	69.
90.000	.1	.0	29	0	5.0	3.0	.1	.0	38.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 210 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-10.2	-14.9	-1931.
5.000	-2.7	-.1	87	10	-31.3	-12.9	-7.5	-14.7	-1846.
10.000	-5.6	-.3	270	29	-20.8	-11.5	-1.8	-14.4	-1692.
15.000	-11.7	-.7	628	51	-18.6	-14.7	9.8	-13.7	-1441.
20.000	-11.3	-1.2	663	87	-17.1	-13.8	21.2	-12.4	-1171.
25.000	-8.9	-1.6	647	128	-13.8	-12.3	30.1	-10.9	-914.
30.000	-5.3	-2.2	645	177	-8.2	-12.3	35.4	-8.7	-675.
35.000	-2.4	-2.7	651	230	-3.7	-11.7	37.8	-6.0	-485.
40.000	1.0	-3.3	663	325	1.5	-10.0	36.8	-2.7	-356.
45.000	4.1	-1.4	651	369	6.3	-3.7	32.7	-1.4	-218.
50.000	5.9	-.4	662	367	8.9	-1.0	26.8	-1.0	-121.
55.000	6.5	-.3	655	305	10.0	-.9	20.3	-.7	-71.
60.000	6.6	-.2	641	223	10.3	-.8	13.7	-.5	-43.
65.000	5.8	-.1	637	169	9.1	-.5	7.9	-.4	-25.
70.000	4.8	-.1	640	117	7.5	-.7	3.1	-.4	-15.
75.000	2.4	-.2	445	74	5.3	-2.2	.7	-.2	3.
80.000	.4	-.1	254	40	1.6	-3.1	.3	-.1	35.
85.000	.1	-.1	172	23	.5	-2.5	.2	-.0	45.
90.000	.1	-.0	100	14	1.4	-1.6	.1	-.0	26.
94.480	.1	.0	29	0	3.3	4.5	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 220 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-4.8	-20.8	-2513.
	-2.4	-.1	87	10	-27.2	-12.4			
5.000							-2.4	-20.7	-2396.
	-5.4	-.4	270	29	-20.1	-12.5			
10.000							3.0	-20.4	-2209.
	-11.0	-.9	628	51	-17.5	-17.2			
15.000							14.0	-19.5	-1928.
	-10.1	-1.4	663	87	-15.3	-16.3			
20.000							24.1	-18.1	-1605.
	-7.8	-1.9	647	128	-12.0	-15.2			
25.000							31.9	-16.1	-1282.
	-4.9	-2.7	645	177	-7.5	-15.5			
30.000							36.8	-13.4	-972.
	-2.1	-3.5	651	230	-3.3	-15.1			
35.000							38.9	-9.9	-720.
	.7	-4.4	663	325	1.1	-13.5			
40.000							38.2	-5.5	-539.
	3.3	-2.5	651	369	5.1	-6.9			
45.000							34.9	-3.0	-352.
	5.9	-1.2	662	367	8.9	-3.3			
50.000							28.9	-1.7	-213.
	7.5	-.7	655	305	11.5	-2.2			
55.000							21.4	-1.1	-126.
	7.5	-.3	641	223	11.6	-1.4			
60.000							13.9	-.7	-72.
	6.2	-.1	637	169	9.7	-.8			
65.000							7.8	-.6	-40.
	4.5	-.1	640	117	7.1	-1.1			
70.000							3.2	-.5	-26.
	1.7	-.2	445	74	3.9	-3.1			
75.000							1.5	-.2	-17.
	-.0	-.2	254	40	-.0	-3.9			
80.000							1.5	-.1	15.
	.2	-.1	172	23	1.1	-2.7			
85.000							1.3	-.0	24.
	.6	-.0	100	14	6.2	-1.3			
90.000							.7	-.0	18.
	.7	.0	29	0	23.8	2.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 230 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-3.4	-26.6	-3041.
	-2.1	-.1	87	10	-23.6	-12.6			
5.000							-1.3	-26.4	-2921.
	-4.8	-.4	270	29	-17.6	-14.7			
10.000							3.4	-26.0	-2714.
	-9.3	-1.0	628	51	-14.7	-20.0			
15.000							12.7	-25.0	-2394.
	-8.3	-1.5	663	87	-12.5	-17.0			
20.000							21.0	-23.5	-2039.
	-6.2	-2.1	647	128	-9.6	-16.3			
25.000							27.2	-21.4	-1688.
	-4.2	-3.0	645	177	-6.5	-16.8			
30.000							31.4	-18.4	-1355.
	-1.8	-3.9	651	230	-2.7	-16.9			
35.000							33.1	-14.6	-1071.
	.3	-5.2	663	325	.4	-16.1			
40.000							32.9	-9.3	-851.
	1.8	-4.0	651	369	2.7	-10.7			
45.000							31.1	-5.4	-608.
	4.9	-2.3	662	367	7.4	-6.3			
50.000							26.2	-3.0	-413.
	7.3	-1.2	655	305	11.1	-3.8			
55.000							18.9	-1.9	-284.
	7.1	-.6	641	223	11.1	-2.8			
60.000							11.8	-1.3	-206.
	5.8	-.3	637	169	9.1	-1.9			
65.000							6.0	-.9	-157.
	4.0	-.3	640	117	6.3	-2.4			
70.000							2.0	-.7	-128.
	1.3	-.3	445	74	2.9	-4.7			
75.000							.7	-.3	-99.
	-.4	-.2	254	40	-1.4	-5.4			
80.000							1.1	-.1	-50.
	-.0	-.1	172	23	-.1	-3.5			
85.000							1.1	-.0	-22.
	.5	-.0	100	14	4.8	-1.3			
90.000							.6	-.0	-3.
	.6	.0	29	0	21.8	4.1			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 240 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-2.2	-.1	87	10	-25.8	-11.1	-10.1	-33.8	-4020.
5.000	-4.8	-.5	270	29	-17.7	-16.9	-7.8	-33.7	-3888.
10.000	-9.1	-1.2	628	51	-14.5	-23.2	-3.0	-33.2	-3646.
15.000	-7.6	-1.7	663	87	-11.5	-19.6	6.1	-32.0	-3236.
20.000	-5.6	-2.5	647	128	-8.6	-19.1	13.7	-30.3	-2805.
25.000	-4.0	-3.3	645	177	-6.1	-18.8	19.3	-27.9	-2389.
30.000	-1.3	-4.4	651	230	-2.0	-19.0	23.2	-24.6	-1996.
35.000	-.0	-6.0	663	325	-.0	-18.5	24.5	-20.2	-1652.
40.000	.5	-5.4	651	369	.8	-14.6	24.5	-14.2	-1379.
45.000	3.8	-3.5	662	367	5.7	-9.6	24.0	-8.8	-1085.
50.000	6.7	-1.8	655	305	10.2	-5.9	20.2	-5.2	-833.
55.000	6.4	-1.1	641	223	9.9	-5.1	13.5	-3.4	-639.
60.000	4.9	-.7	637	169	7.6	-4.2	7.2	-2.3	-500.
65.000	2.8	-.6	640	117	4.4	-5.0	2.3	-1.6	-389.
70.000	.3	-.6	445	74	.7	-7.7	-.5	-1.0	-299.
75.000	-.8	-.3	254	40	-3.1	-7.7	-.8	-.5	-220.
80.000	-.4	-.1	172	23	-2.6	-4.8	-.1	-.1	-139.
85.000	.0	-.0	100	14	.5	-2.0	.4	-.0	-82.
90.000	.3	.0	29	0	11.4	8.9	.3	-.0	-29.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 250 CONFIGURATION B REFERENCE PRESSURE 17.9 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							-2.7	-36.8	-4073.
5.000	-1.6	-.1	87	10	-18.5	-10.0	-1.1	-36.7	-3965.
10.000	-3.3	-.4	270	29	-12.3	-14.4	2.2	-36.3	-3766.
15.000	-6.1	-1.0	628	51	-9.7	-19.0	8.3	-35.3	-3391.
20.000	-4.5	-1.5	663	87	-6.8	-16.8	12.8	-33.8	-3001.
25.000	-2.8	-2.2	647	128	-4.4	-16.9	15.6	-31.7	-2628.
30.000	-2.0	-3.1	645	177	-3.1	-17.5	17.7	-28.6	-2272.
35.000	.2	-4.3	651	230	.3	-18.5	17.4	-24.3	-1946.
40.000	.7	-6.0	663	325	1.0	-18.6	16.8	-18.3	-1673.
45.000	-.5	-6.2	651	369	-.8	-16.9	17.3	-12.0	-1370.
50.000	2.3	-4.6	662	367	3.5	-12.7	15.0	-7.4	-1095.
55.000	5.4	-2.7	655	305	8.2	-8.8	9.6	-4.7	-867.
60.000	5.0	-1.6	641	223	7.8	-7.3	4.6	-3.1	-690.
65.000	3.8	-1.0	637	169	5.9	-5.9	.8	-2.1	-543.
70.000	2.1	-.8	640	117	3.3	-6.9	-1.3	-1.3	-411.
75.000	-.1	-.7	445	74	-.2	-9.8	-1.2	-.6	-291.
80.000	-1.0	-.4	254	40	-3.9	-9.6	-.2	-.2	-183.
85.000	-.6	-.1	172	23	-3.5	-6.1	.4	-.0	-105.
90.000	.0	-.0	100	14	.3	-2.8	.4	-.0	-37.
94.480	.4	.0	29	0	13.5	11.6	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 260 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							14.0	-36.4	-3987.
	-1.5	-.1	87	10	-17.1	-8.9			
5.000							15.5	-36.3	-3856.
	-1.8	-.4	270	29	-6.5	-13.3			
10.000							17.3	-35.9	-3672.
	-1.8	-.7	628	51	-2.8	-14.6			
15.000							19.0	-35.2	-3367.
	-.2	-1.1	663	87	-.3	-12.4			
20.000							19.2	-34.1	-3065.
	.9	-1.7	647	128	1.3	-13.4			
25.000							18.4	-32.4	-2774.
	1.0	-2.4	645	177	1.5	-13.5			
30.000							17.4	-30.0	-2496.
	2.6	-3.5	651	230	4.0	-15.3			
35.000							14.8	-26.5	-2224.
	2.1	-5.3	663	325	3.1	-16.3			
40.000							12.7	-21.2	-1983.
	-.7	-6.2	651	369	-1.1	-16.8			
45.000							13.4	-15.0	-1688.
	1.3	-5.2	662	367	2.0	-14.3			
50.000							12.1	-9.7	-1417.
	4.2	-3.4	655	305	6.3	-11.1			
55.000							8.0	-6.3	-1187.
	4.2	-2.1	641	223	6.5	-9.2			
60.000							3.8	-4.3	-990.
	3.3	-1.3	637	169	5.2	-7.9			
65.000							.5	-2.9	-809.
	2.1	-1.1	640	117	3.3	-9.3			
70.000							-1.7	-1.8	-628.
	.1	-1.0	445	74	.1	-13.4			
75.000							-1.7	-.9	-441.
	-.9	-.6	254	40	-3.7	-14.3			
80.000							-.8	-.3	-277.
	-.8	-.2	172	23	-4.6	-9.2			
85.000							-.0	-.1	-152.
	-.2	-.1	100	14	-2.3	-4.6			
90.000							.2	-.0	-52.
	.2	.0	29	0	7.6	13.9			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 270 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-.9	-.0	87	10	-10.7	-4.5	39.1	-34.1	-3743.
5.000	.1	-.3	270	29	.2	-10.2	40.1	-34.0	-3609.
10.000	2.1	-.5	628	51	3.3	-10.6	40.0	-33.7	-3453.
15.000	3.4	-.7	663	87	5.1	-7.5	38.0	-33.2	-3222.
20.000	3.9	-1.1	647	128	6.1	-8.8	34.6	-32.6	-3011.
25.000	4.0	-1.7	645	177	6.2	-9.5	30.6	-31.4	-2820.
30.000	5.2	-2.6	651	230	8.0	-11.1	26.6	-29.7	-2641.
35.000	4.6	-4.0	663	325	6.9	-12.2	21.4	-27.2	-2449.
40.000	.2	-5.7	651	369	.3	-15.3	16.9	-23.2	-2253.
45.000	1.1	-5.5	662	367	1.7	-15.1	16.6	-17.5	-1972.
50.000	3.5	-4.1	655	305	5.3	-13.3	15.5	-12.0	-1709.
55.000	4.3	-2.6	641	223	6.6	-11.5	12.0	-8.0	-1472.
60.000	4.0	-1.8	637	169	6.3	-10.6	7.8	-5.4	-1239.
65.000	3.3	-1.5	640	117	5.2	-12.7	3.8	-3.6	-1002.
70.000	1.0	-1.2	445	74	2.3	-16.4	.5	-2.1	-749.
75.000	-.5	-.6	254	40	-2.1	-15.9	-.6	-.9	-494.
80.000	-.5	-.2	172	23	-2.8	-8.8	-.0	-.2	-297.
85.000	.0	-.0	100	14	.2	-2.8	.4	-.0	-152.
90.000	.4	.0	29	0	14.8	10.0	.4	-.0	-52.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 280 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000	-.2	.1	87	10	-2.4	7.4	75.1	-32.2	-3112.
5.000	1.6	.0	270	29	5.9	.5	75.3	-32.3	-3007.
10.000	5.0	-.1	628	51	7.9	-2.6	73.7	-32.3	-2937.
15.000	6.3	-.2	663	87	9.5	-2.5	68.7	-32.1	-2869.
20.000	7.1	-.5	647	128	11.0	-4.2	62.4	-31.9	-2802.
25.000	7.7	-1.0	645	177	11.9	-5.4	55.3	-31.4	-2736.
30.000	9.1	-1.8	651	230	14.0	-7.6	47.6	-30.4	-2669.
35.000	8.7	-3.0	663	325	13.2	-9.4	38.5	-28.7	-2557.
40.000	3.1	-5.6	651	369	4.8	-15.3	29.8	-25.6	-2394.
45.000	3.0	-6.2	662	367	4.5	-16.8	26.6	-20.0	-2132.
50.000	4.5	-4.7	655	305	6.8	-15.5	23.7	-13.8	-1876.
55.000	5.3	-3.0	641	223	8.3	-13.4	19.2	-9.1	-1628.
60.000	5.4	-2.1	637	169	8.5	-12.7	13.9	-6.1	-1364.
65.000	5.1	-1.8	640	117	8.0	-15.2	8.5	-4.0	-1085.
70.000	2.4	-1.4	445	74	5.5	-18.3	3.3	-2.2	-781.
75.000	.2	-.7	254	40	.9	-16.8	.9	-.8	-486.
80.000	-.0	-.2	172	23	-.2	-7.1	.7	-.2	-275.
85.000	.2	.0	100	14	2.1	.8	.7	.0	-132.
90.000	.5	.0	29	0	16.7	1.9	.5	-.0	-45.
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 290 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							115.3	-28.9	-2445.
	-.1	.1	87	10	-.7	13.2			
5.000							115.3	-29.1	-2366.
	3.0	.3	270	29	11.2	9.3			
10.000							112.3	-29.4	-2384.
	8.2	.3	628	51	13.1	5.8			
15.000							104.1	-29.6	-2466.
	9.4	.2	663	87	14.2	2.2			
20.000							94.6	-29.8	-2526.
	10.4	.0	647	128	16.0	.1			
25.000							84.3	-29.9	-2568.
	11.7	-.3	645	177	18.1	-1.5			
30.000							72.6	-29.6	-2587.
	13.9	-.9	651	230	21.4	-4.0			
35.000							58.7	-28.7	-2542.
	14.0	-2.0	663	325	21.1	-6.1			
40.000							44.7	-26.7	-2428.
	7.6	-5.0	651	369	11.6	-13.5			
45.000							37.1	-21.7	-2232.
	6.4	-6.2	662	367	9.7	-16.9			
50.000							30.7	-15.5	-2024.
	6.7	-5.2	655	305	10.3	-17.0			
55.000							24.0	-10.3	-1791.
	7.0	-3.4	641	223	11.0	-15.4			
60.000							17.0	-6.9	-1512.
	6.6	-2.5	637	169	10.3	-14.8			
65.000							10.4	-4.4	-1204.
	5.8	-2.0	640	117	9.0	-16.7			
70.000							4.6	-2.4	-874.
	3.0	-1.5	445	74	6.8	-20.2			
75.000							1.6	-.9	-556.
	1.0	-.8	254	40	4.0	-19.4			
80.000							.6	-.1	-324.
	.3	-.2	172	23	1.9	-7.3			
85.000							.3	.0	-162.
	.1	.0	100	14	.7	2.2			
90.000							.2	-.0	-58.
	.2	-.0	29	0	6.4	-1.2			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 300 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							154.6	-24.1	-1741.
	.1	.2	87	10	1.6	18.6			
5.000							154.5	-24.2	-1732.
	4.4	.5	270	29	16.2	18.4			
10.000							150.1	-24.8	-1847.
	11.7	.6	628	51	18.7	12.4			
15.000							138.4	-25.4	-2048.
	12.8	.4	663	87	19.3	5.0			
20.000							125.6	-25.8	-2199.
	13.9	.5	647	128	21.5	3.6			
25.000							111.7	-26.3	-2320.
	15.9	.4	645	177	24.6	2.5			
30.000							95.8	-26.7	-2410.
	18.6	.0	651	230	28.5	.0			
35.000							77.2	-26.8	-2442.
	18.6	-.7	663	325	28.1	-2.1			
40.000							58.6	-26.1	-2389.
	12.0	-3.6	651	369	18.5	-9.9			
45.000							46.5	-22.4	-2246.
	10.3	-5.7	662	367	15.5	-15.5			
50.000							36.2	-16.7	-2076.
	9.4	-5.5	655	305	14.4	-18.1			
55.000							26.8	-11.2	-1862.
	8.6	-3.7	641	223	13.4	-16.7			
60.000							18.3	-7.5	-1579.
	7.2	-2.8	637	169	11.3	-16.3			
65.000							11.1	-4.7	-1253.
	5.6	-2.1	640	117	8.7	-18.3			
70.000							5.5	-2.6	-895.
	3.0	-1.6	445	74	6.7	-21.1			
75.000							2.5	-1.0	-545.
	1.2	-.8	254	40	4.8	-19.8			
80.000							1.3	-.2	-292.
	.6	-.2	172	23	3.2	-8.9			
85.000							.8	-.0	-117.
	.4	-.0	100	14	3.7	-.6			
90.000							.4	-.0	-32.
	.4	.0	29	0	13.7	.5			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 310 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							190.1	-20.1	-1326.
5.000	.1	.2	87	10	.8	18.4	190.0	-20.2	-1350.
10.000	5.1	.6	270	29	18.9	20.3	184.9	-20.8	-1502.
15.000	14.2	.8	628	51	22.5	15.0	170.8	-21.6	-1742.
20.000	15.4	.6	663	87	23.2	6.4	155.4	-22.2	-1925.
25.000	16.8	.7	647	128	25.9	5.7	138.6	-22.9	-2076.
30.000	19.7	.9	645	177	30.5	5.0	118.9	-23.8	-2201.
35.000	22.8	.6	651	230	35.1	2.7	96.1	-24.4	-2277.
40.000	23.3	.1	663	325	35.2	.4	72.8	-24.5	-2278.
45.000	16.8	-2.5	651	369	25.8	-6.7	56.0	-22.1	-2182.
50.000	14.6	-5.0	662	367	22.0	-13.6	41.4	-17.1	-2048.
55.000	12.2	-5.5	655	305	18.6	-18.2	29.2	-11.5	-1853.
60.000	10.2	-3.8	641	223	15.9	-17.3	19.1	-7.7	-1574.
65.000	7.9	-2.9	637	169	12.4	-17.2	11.2	-4.8	-1253.
70.000	5.3	-2.1	640	117	8.3	-18.1	5.8	-2.6	-901.
75.000	2.7	-1.5	445	74	6.0	-21.0	3.2	-1.1	-552.
80.000	1.3	-.9	254	40	5.0	-21.5	1.9	-.2	-297.
85.000	.6	-.2	172	23	3.3	-9.3	1.3	-.0	-120.
90.000	.7	-.0	100	14	6.6	-.0	.7	-.0	-33.
94.480	.7	.0	29	0	24.0	1.9	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 320 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							218.2	-17.0	-1058.
	.1	.1	87	10	1.0	13.6			
5.000							218.1	-17.2	-1096.
	5.2	.4	270	29	19.2	15.2			
10.000							212.9	-17.6	-1235.
	15.3	.7	628	51	24.4	13.5			
15.000							197.6	-18.3	-1444.
	17.4	.6	663	87	26.2	6.7			
20.000							180.2	-18.9	-1617.
	19.2	.8	647	128	29.6	6.1			
25.000							161.0	-19.7	-1765.
	22.6	1.0	645	177	35.0	5.7			
30.000							138.5	-20.7	-1892.
	26.3	.9	651	230	40.3	3.7			
35.000							112.2	-21.5	-1989.
	27.5	.3	663	325	41.4	1.0			
40.000							84.7	-21.9	-2031.
	21.9	-1.6	651	369	33.6	-4.4			
45.000							62.9	-20.2	-1971.
	19.3	-4.3	662	367	29.1	-11.8			
50.000							43.6	-15.9	-1871.
	15.2	-5.2	655	305	23.2	-17.2			
55.000							28.4	-10.7	-1711.
	11.5	-3.6	641	223	18.0	-16.0			
60.000							16.8	-7.1	-1458.
	8.0	-2.7	637	169	12.6	-16.3			
65.000							8.8	-4.3	-1158.
	4.3	-2.0	640	117	6.8	-17.1			
70.000							4.5	-2.3	-826.
	1.7	-1.4	445	74	3.8	-18.9			
75.000							2.8	-.9	-502.
	1.0	-.8	254	40	3.8	-19.1			
80.000							1.8	-.2	-274.
	.4	-.2	172	23	2.3	-7.7			
85.000							1.5	.0	-118.
	.7	.0	100	14	6.5	.9			
90.000							.8	-.0	-37.
	.8	.0	29	0	28.0	2.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 330 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							240.6	-12.1	-784.
	.3	.1	87	10	3.2	10.6			
5.000							240.3	-12.2	-818.
	5.3	.3	270	29	19.5	11.3			
10.000							235.0	-12.5	-927.
	16.2	.6	628	51	25.9	11.0			
15.000							218.8	-13.1	-1087.
	19.1	.5	663	87	28.8	5.8			
20.000							199.7	-13.6	-1226.
	21.3	.7	647	128	32.9	5.5			
25.000							178.4	-14.3	-1350.
	25.1	.9	645	177	39.0	5.4			
30.000							153.3	-15.2	-1460.
	29.0	.9	651	230	44.5	4.0			
35.000							124.3	-16.2	-1544.
	30.4	.6	663	325	45.9	1.8			
40.000							93.9	-16.7	-1584.
	25.8	-.7	651	369	39.5	-1.8			
45.000							68.1	-16.1	-1537.
	22.8	-3.1	662	367	34.5	-8.5			
50.000							45.3	-13.0	-1461.
	17.5	-4.4	655	305	26.8	-14.3			
55.000							27.7	-8.6	-1335.
	12.5	-2.9	641	223	19.5	-13.1			
60.000							15.2	-5.7	-1130.
	8.0	-2.2	637	169	12.6	-13.3			
65.000							7.2	-3.5	-886.
	3.8	-1.7	640	117	6.0	-14.4			
70.000							3.4	-1.8	-611.
	1.3	-1.1	445	74	3.0	-15.1			
75.000							2.1	-.7	-343.
	.7	-.6	254	40	2.6	-14.5			
80.000							1.4	-.1	-167.
	.1	-.1	172	23	.8	-4.6			
85.000							1.3	.0	-57.
	.5	.0	100	14	5.1	2.8			
90.000							.8	-.0	-15.
	.8	.0	29	0	26.8	2.7			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 340 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							254.5	-6.2	-276.
	.1	.1	87	10	1.7	10.4			
5.000							254.3	-6.3	-324.
	5.7	.4	270	29	21.0	12.7			
10.000							248.7	-6.7	-441.
	17.9	.5	628	51	28.5	10.5			
15.000							230.7	-7.2	-599.
	20.9	.4	663	87	31.6	5.1			
20.000							209.8	-7.7	-728.
	23.5	.6	647	128	36.3	5.0			
25.000							186.3	-8.3	-842.
	27.1	1.1	645	177	42.1	6.1			
30.000							159.2	-9.4	-943.
	30.4	.9	651	230	46.6	3.8			
35.000							128.8	-10.2	-1018.
	31.8	.6	663	325	47.9	1.9			
40.000							97.0	-10.9	-1047.
	28.3	-.0	651	369	43.4	-.1			
45.000							68.8	-10.8	-1006.
	25.2	-1.9	662	367	38.0	-5.3			
50.000							43.6	-8.9	-949.
	18.8	-3.1	655	305	28.7	-10.1			
55.000							24.8	-5.8	-867.
	12.8	-2.1	641	223	20.0	-9.2			
60.000							12.0	-3.8	-728.
	7.8	-1.6	637	169	12.2	-9.2			
65.000							4.2	-2.2	-564.
	3.0	-1.1	640	117	4.7	-9.6			
70.000							1.2	-1.1	-386.
	.6	-.7	445	74	1.5	-9.8			
75.000							.6	-.4	-211.
	.2	-.4	254	40	.7	-9.1			
80.000							.4	.0	-98.
	-.3	-.0	172	23	-1.8	-1.9			
85.000							.7	.0	-28.
	.2	.0	100	14	1.6	3.6			
90.000							.5	.0	-9.
	.5	.0	29	0	18.6	2.9			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 350 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

X-COORDINATE FEET	Z-FORCE KIPS	Y-FORCE KIPS	Z-AREA SQ FT	Y-AREA SQ FT	Z-PRESS PSF	Y-PRESS PSF	Z-SHEAR KIPS	Y-SHEAR KIPS	X-MOMENT FT-KIPS
0.000							259.8	-2.7	16.
	-.4	.1	87	10	-4.2	10.1			
5.000							260.2	-2.8	-41.
	6.1	.4	270	29	22.6	12.9			
10.000							254.1	-3.2	-153.
	19.5	.5	628	51	31.0	9.0			
15.000							234.6	-3.6	-282.
	22.0	.3	663	87	33.2	3.2			
20.000							212.6	-3.9	-370.
	24.2	.4	647	128	37.4	3.1			
25.000							188.4	-4.3	-439.
	27.9	.6	645	177	43.3	3.4			
30.000							160.5	-4.9	-488.
	31.1	.5	651	230	47.7	2.0			
35.000							129.4	-5.4	-522.
	32.8	.3	663	325	49.5	.8			
40.000							96.6	-5.6	-530.
	30.7	-.0	651	369	47.1	-.1			
45.000							65.9	-5.6	-490.
	27.3	-1.0	662	367	41.2	-2.8			
50.000							38.6	-4.6	-447.
	19.7	-1.6	655	305	30.1	-5.3			
55.000							18.9	-2.9	-406.
	12.8	-1.1	641	223	20.0	-4.8			
60.000							6.1	-1.9	-335.
	7.1	-.8	637	169	11.2	-4.9			
65.000							-1.1	-1.0	-252.
	1.9	-.6	640	117	3.0	-4.9			
70.000							-3.0	-.5	-165.
	-.3	-.3	445	74	-.6	-4.5			
75.000							-2.7	-.1	-77.
	-.5	-.2	254	40	-1.9	-3.9			
80.000							-2.2	.0	-23.
	-1.1	-.0	172	23	-6.4	-.5			
85.000							-1.1	.0	8.
	-.9	.0	100	14	-8.6	2.1			
90.000							-.2	-.0	4.
	-.2	.0	29	0	-8.6	3.9			
94.480							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 0 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							251.3	-5.6	-8693.
	21.5	1.9	579	213	37.1	9.1			
5.000							229.8	-7.5	-7930.
	20.2	2.9	594	243	34.1	11.8			
10.000							209.6	-10.4	-7263.
	21.4	3.9	612	291	35.0	13.4			
15.000							188.2	-14.3	-6600.
	21.8	2.8	653	374	33.4	7.4			
20.000							166.3	-17.1	-5953.
	17.0	-.3	639	443	26.6	-.6			
25.000							149.4	-16.8	-5503.
	16.9	-3.1	630	455	26.8	-6.9			
30.000							132.5	-13.7	-5008.
	21.9	-3.7	656	364	33.4	-10.1			
35.000							110.6	-10.0	-4231.
	20.8	-3.9	655	237	31.7	-16.4			
40.000							89.9	-6.1	-3459.
	19.3	-2.7	658	180	29.3	-14.7			
45.000							70.6	-3.5	-2717.
	17.4	-1.3	683	139	25.5	-9.6			
50.000							53.2	-2.1	-2051.
	14.5	-.5	719	105	20.1	-4.9			
55.000							38.7	-1.6	-1506.
	12.9	-.8	759	78	17.0	-9.7			
60.000							25.8	-.9	-1053.
	11.8	-.5	801	56	14.7	-9.1			
65.000							14.0	-.4	-675.
	9.3	-.4	478	35	19.5	-12.2			
70.000							4.7	.1	-247.
	4.7	.1	154	13	30.2	5.1			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 10 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							246.7	-6.5	-8515.
	20.5	1.9	579	213	35.3	8.8			
5.000							226.2	-8.4	-7792.
	19.4	2.8	594	243	32.7	11.7			
10.000							206.8	-11.2	-7153.
	20.9	3.7	612	291	34.1	12.9			
15.000							185.9	-15.0	-6506.
	21.4	2.5	653	374	32.8	6.7			
20.000							164.4	-17.5	-5867.
	17.0	-.5	639	443	26.6	-1.1			
25.000							147.4	-17.0	-5411.
	17.0	-3.4	630	455	27.0	-7.4			
30.000							130.4	-13.6	-4901.
	22.2	-3.9	656	364	33.9	-10.8			
35.000							108.2	-9.7	-4103.
	21.2	-3.8	655	237	32.4	-16.1			
40.000							87.0	-5.9	-3311.
	19.7	-2.7	658	180	29.9	-14.7			
45.000							67.3	-3.2	-2553.
	17.9	-1.2	683	139	26.1	-8.9			
50.000							49.4	-2.0	-1869.
	14.8	-.6	719	105	20.6	-5.6			
55.000							34.6	-1.4	-1316.
	12.7	-.7	759	78	16.7	-8.7			
60.000							21.9	-.7	-872.
	10.8	-.5	801	56	13.4	-8.1			
65.000							11.2	-.3	-535.
	7.5	-.4	478	35	15.6	-10.6			
70.000							3.7	.1	-198.
	3.7	.1	154	13	23.9	6.2			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 20 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							239.3	-7.2	-8433.
	19.2	1.8	579	213	33.2	8.4			
5.000							220.1	-9.0	-7746.
	18.7	2.7	594	243	31.4	11.1			
10.000							201.4	-11.7	-7122.
	20.4	3.5	612	291	33.3	12.1			
15.000							181.0	-15.2	-6474.
	21.4	2.0	653	374	32.8	5.3			
20.000							159.6	-17.2	-5807.
	17.2	-.8	639	443	27.0	-1.7			
25.000							142.3	-16.5	-5310.
	17.3	-3.3	630	455	27.5	-7.4			
30.000							125.0	-13.1	-4763.
	22.1	-3.9	656	364	33.8	-10.7			
35.000							102.9	-9.2	-3952.
	21.4	-3.5	655	237	32.6	-14.9			
40.000							81.5	-5.7	-3145.
	19.9	-2.6	658	180	30.3	-14.5			
45.000							61.6	-3.1	-2366.
	17.9	-1.3	683	139	26.2	-9.1			
50.000							43.7	-1.8	-1668.
	14.8	-.6	719	105	20.6	-5.6			
55.000							28.8	-1.2	-1097.
	12.1	-.6	759	78	15.9	-7.8			
60.000							16.7	-.6	-656.
	9.4	-.4	801	56	11.8	-7.4			
65.000							7.3	-.2	-347.
	5.0	-.3	478	35	10.6	-7.8			
70.000							2.3	.1	-124.
	2.3	.1	154	13	14.6	6.7			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 30 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							228.1	-5.9	-8181.
	17.6	1.8	579	213	30.4	8.4			
5.000							210.5	-7.7	-7538.
	17.3	2.5	594	243	29.2	10.3			
10.000							193.2	-10.2	-6943.
	19.5	3.2	612	291	31.9	11.1			
15.000							173.7	-13.4	-6302.
	21.4	1.9	653	374	32.7	5.1			
20.000							152.3	-15.3	-5602.
	17.6	-.2	639	443	27.6	-.5			
25.000							134.7	-15.1	-5064.
	17.6	-2.7	630	455	27.9	-5.8			
30.000							117.1	-12.4	-4484.
	21.6	-3.7	656	364	33.0	-10.3			
35.000							95.5	-8.7	-3675.
	20.9	-3.3	655	237	31.9	-14.0			
40.000							74.6	-5.4	-2873.
	19.0	-2.5	658	180	28.8	-13.9			
45.000							55.6	-2.9	-2126.
	17.0	-1.2	683	139	24.9	-8.7			
50.000							38.6	-1.6	-1456.
	14.3	-.6	719	105	19.8	-5.8			
55.000							24.3	-1.0	-897.
	11.5	-.6	759	78	15.1	-7.3			
60.000							12.9	-.5	-474.
	8.7	-.4	801	56	10.8	-6.7			
65.000							4.2	-.1	-189.
	3.2	-.2	478	35	6.7	-6.4			
70.000							1.0	.1	-58.
	1.0	.1	154	13	6.3	9.3			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 40 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							210.4	-5.0	-7616.
	14.9	1.6	579	213	25.7	7.6			
5.000							195.5	-6.6	-7067.
	15.0	2.2	594	243	25.3	8.9			
10.000							180.5	-8.8	-6542.
	17.5	2.7	612	291	28.6	9.4			
15.000							163.0	-11.5	-5950.
	19.9	1.6	653	374	30.5	4.2			
20.000							143.0	-13.1	-5275.
	17.5	.2	639	443	27.3	.4			
25.000							125.5	-13.3	-4716.
	17.8	-2.0	630	455	28.2	-4.3			
30.000							107.8	-11.3	-4111.
	20.9	-3.6	656	364	31.9	-9.8			
35.000							86.9	-7.7	-3317.
	19.8	-2.9	655	237	30.2	-12.4			
40.000							67.1	-4.8	-2553.
	17.4	-2.2	658	180	26.4	-12.3			
45.000							49.7	-2.6	-1868.
	15.3	-1.2	683	139	22.5	-8.4			
50.000							34.4	-1.4	-1259.
	12.9	-.6	719	105	18.0	-5.4			
55.000							21.4	-.9	-746.
	10.6	-.5	759	78	14.0	-6.4			
60.000							10.8	-.4	-357.
	8.8	-.3	801	56	11.0	-5.8			
65.000							2.0	-.0	-75.
	2.2	-.2	478	35	4.5	-6.2			
70.000							-.1	.2	-2.
	-.1	.2	154	13	-.8	13.6			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 50 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							187.2	-4.5	-6870.
	11.8	1.3	579	213	20.4	6.0			
5.000							175.4	-5.8	-6434.
	12.3	1.6	594	243	20.7	6.8			
10.000							163.1	-7.4	-5999.
	15.0	2.1	612	291	24.4	7.1			
15.000							148.2	-9.5	-5482.
	17.8	.9	653	374	27.3	2.5			
20.000							130.3	-10.4	-4856.
	16.9	.4	639	443	26.4	.9			
25.000							113.5	-10.8	-4283.
	17.7	-1.1	630	455	28.1	-2.5			
30.000							95.7	-9.7	-3652.
	19.9	-3.2	656	364	30.4	-8.7			
35.000							75.8	-6.5	-2876.
	18.5	-2.4	655	237	28.2	-10.1			
40.000							57.3	-4.1	-2151.
	15.4	-2.0	658	180	23.5	-10.8			
45.000							41.9	-2.1	-1536.
	13.2	-1.0	683	139	19.3	-7.4			
50.000							28.7	-1.1	-1006.
	10.8	-.5	719	105	15.1	-4.9			
55.000							17.8	-.6	-570.
	9.1	-.4	759	78	12.0	-5.0			
60.000							8.7	-.2	-240.
	8.6	-.2	801	56	10.7	-4.3			
65.000							.1	.0	28.
	1.2	-.2	478	35	2.6	-5.9			
70.000							-1.1	.2	50.
	-1.1	.2	154	13	-7.3	17.1			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 60 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							155.3	-2.4	-5754.
5.000	9.6	1.0	579	213	16.6	4.9	145.6	-3.4	-5395.
10.000	10.2	1.3	594	243	17.2	5.4	135.4	-4.7	-5027.
15.000	12.6	1.6	612	291	20.6	5.5	122.8	-6.3	-4579.
20.000	15.3	.6	653	374	23.4	1.5	107.6	-6.9	-4024.
25.000	15.5	.6	639	443	24.2	1.4	92.1	-7.5	-3472.
30.000	16.5	-.2	630	455	26.2	-.5	75.6	-7.3	-2863.
35.000	17.8	-2.3	656	364	27.2	-6.3	57.8	-5.0	-2149.
40.000	16.0	-1.7	655	237	24.4	-7.2	41.8	-3.3	-1513.
45.000	12.7	-1.5	658	180	19.2	-8.5	29.1	-1.7	-1002.
50.000	10.1	-.9	683	139	14.9	-6.2	19.0	-.9	-595.
55.000	7.9	-.5	719	105	10.9	-5.0	11.1	-.4	-284.
60.000	6.5	-.3	759	78	8.5	-3.5	4.6	-.1	-60.
65.000	6.6	-.2	801	56	8.2	-2.8	-1.9	.1	130.
70.000	-.1	-.2	478	35	-.2	-4.5	-1.9	.2	90.
75.600	-1.9	.2	154	13	-12.0	17.3	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 70 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							117.4	-.0	-4413.
	8.0	1.0	579	213	13.8	4.5			
5.000							109.4	-1.0	-4105.
	8.4	1.1	594	243	14.1	4.5			
10.000							101.0	-2.1	-3792.
	10.3	1.3	612	291	16.8	4.5			
15.000							90.8	-3.3	-3419.
	12.5	.3	653	374	19.1	.9			
20.000							78.3	-3.7	-2949.
	13.7	.7	639	443	21.4	1.7			
25.000							64.6	-4.4	-2438.
	15.0	.4	630	455	23.7	.8			
30.000							49.7	-4.8	-1865.
	15.7	-1.7	656	364	24.0	-4.6			
35.000							33.9	-3.1	-1220.
	13.3	-1.1	655	237	20.3	-4.6			
40.000							20.7	-2.0	-680.
	9.5	-1.1	658	180	14.4	-5.9			
45.000							11.2	-.9	-292.
	6.8	-.6	683	139	9.9	-4.1			
50.000							4.4	-.4	-18.
	4.4	-.4	719	105	6.1	-3.7			
55.000							.0	.0	156.
	2.6	-.1	759	78	3.4	-1.1			
60.000							-2.6	.1	233.
	2.2	-.0	801	56	2.7	-.6			
65.000							-4.8	.1	264.
	-2.3	-.0	478	35	-4.8	-1.3			
70.000							-2.5	.2	124.
	-2.5	.2	154	13	-16.0	13.7			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 80 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							75.1	2.3	-2755.
5.000	6.6	.9	579	213	11.4	4.3	68.5	1.4	-2489.
10.000	6.7	.9	594	243	11.3	3.9	61.8	.4	-2228.
15.000	8.1	1.1	612	291	13.2	3.7	53.7	-.7	-1924.
20.000	9.8	.3	653	374	15.0	.8	43.8	-1.0	-1541.
25.000	11.6	.8	639	443	18.1	1.7	32.3	-1.7	-1091.
30.000	12.8	.6	630	455	20.4	1.4	19.4	-2.3	-585.
35.000	12.8	-1.0	656	364	19.5	-2.7	6.6	-1.4	-52.
40.000	9.9	-.5	655	237	15.2	-2.1	-3.3	-.9	355.
45.000	6.2	-.6	658	180	9.4	-3.1	-9.5	-.3	608.
50.000	3.2	-.3	683	139	4.7	-2.2	-12.7	.0	730.
55.000	.5	-.3	719	105	.7	-3.2	-13.1	.4	731.
60.000	-1.6	.1	759	78	-2.1	.8	-11.6	.3	635.
65.000	-2.5	.1	801	56	-3.1	1.0	-9.1	.2	479.
70.000	-5.4	.1	478	35	-11.4	1.7	-3.7	.2	186.
75.600	-3.7	.2	154	13	-23.8	13.6	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 90 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							40.0	4.3	-1371.
	4.2	.6	579	213	7.2	3.0			
5.000							35.8	3.7	-1201.
	4.7	.9	594	243	8.0	3.8			
10.000							31.1	2.8	-1014.
	6.0	1.1	612	291	9.8	3.6			
15.000							25.1	1.7	-785.
	7.1	.5	653	374	10.9	1.2			
20.000							17.9	1.2	-503.
	9.2	.7	639	443	14.4	1.7			
25.000							8.7	.5	-126.
	10.7	.6	630	455	17.0	1.3			
30.000							-2.0	-.1	315.
	10.4	-.6	656	364	15.8	-1.6			
35.000							-12.3	.5	751.
	7.1	-.0	655	237	10.8	-.1			
40.000							-19.4	.5	1043.
	3.4	-.1	658	180	5.1	-.6			
45.000							-22.8	.6	1179.
	.3	-.0	683	139	.4	-.2			
50.000							-23.1	.7	1180.
	-2.5	-.2	719	105	-3.4	-1.6			
55.000							-20.6	.8	1058.
	-4.6	.3	759	78	-6.1	3.7			
60.000							-16.0	.5	834.
	-5.4	.3	801	56	-6.8	4.7			
65.000							-10.6	.3	551.
	-6.7	.1	478	35	-14.0	3.2			
70.000							-3.9	.2	197.
	-3.9	.2	154	13	-25.2	12.1			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 100 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							14.5	6.5	-574.
	1.9	.5	579	213	3.3	2.5			
5.000							12.6	6.0	-479.
	2.7	1.0	594	243	4.6	4.1			
10.000							9.9	5.0	-358.
	3.9	1.1	612	291	6.3	3.8			
15.000							6.0	3.9	-193.
	4.2	.5	653	374	6.4	1.2			
20.000							1.8	3.5	-8.
	6.2	.4	639	443	9.8	.9			
25.000							-4.4	3.0	280.
	8.1	.5	630	455	12.9	1.1			
30.000							-12.5	2.5	648.
	8.5	.3	656	364	12.9	.8			
35.000							-21.0	2.3	1022.
	5.4	.6	655	237	8.3	2.4			
40.000							-26.4	1.7	1263.
	2.2	.3	658	180	3.3	1.8			
45.000							-28.6	1.3	1364.
	-1.0	.2	683	139	-1.4	1.7			
50.000							-27.6	1.1	1327.
	-3.8	.0	719	105	-5.3	.2			
55.000							-23.8	1.1	1161.
	-6.2	.4	759	78	-8.2	5.5			
60.000							-17.6	.7	881.
	-7.3	.4	801	56	-9.1	7.0			
65.000							-10.3	.3	530.
	-6.8	.1	478	35	-14.3	4.2			
70.000							-3.5	.1	175.
	-3.5	.1	154	13	-22.5	8.3			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 110 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-3.4	11.2	-194.
5.000	.4	.5	579	213	.7	2.2	-3.8	10.7	-141.
10.000	1.2	1.1	594	243	2.1	4.4	-5.0	9.7	-59.
15.000	2.3	1.2	612	291	3.8	4.1	-7.4	8.5	72.
20.000	2.4	.8	653	374	3.7	2.2	-9.8	7.6	215.
25.000	4.0	.9	639	443	6.2	2.1	-13.8	6.7	445.
30.000	5.8	1.2	630	455	9.2	2.7	-19.6	5.5	749.
35.000	6.7	1.4	656	364	10.2	3.9	-26.2	4.1	1073.
40.000	4.4	1.3	655	237	6.7	5.5	-30.6	2.8	1299.
45.000	1.7	.8	658	180	2.6	4.7	-32.3	1.9	1409.
50.000	-1.5	.5	683	139	-2.2	3.9	-30.7	1.4	1375.
55.000	-4.7	.2	719	105	-6.5	2.2	-26.0	1.1	1194.
60.000	-7.0	.5	759	78	-9.3	6.0	-19.0	.7	903.
65.000	-8.5	.4	801	56	-10.6	7.3	-10.5	.3	533.
70.000	-7.2	.2	478	35	-15.0	5.5	-3.4	.1	170.
75.600	-3.4	.1	154	13	-21.7	5.4	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 120 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-14.7	17.2	-71.
	-.7	.4	579	213	-1.3	1.7			
5.000							-14.0	16.9	-42.
	.5	1.2	594	243	.8	4.9			
10.000							-14.4	15.7	32.
	1.9	1.4	612	291	3.1	4.8			
15.000							-16.3	14.3	168.
	1.6	1.7	653	374	2.5	4.5			
20.000							-17.9	12.6	302.
	2.1	2.0	639	443	3.3	4.4			
25.000							-20.1	10.6	487.
	3.5	2.2	630	455	5.6	4.8			
30.000							-23.6	8.4	729.
	5.0	2.6	656	364	7.6	7.0			
35.000							-28.6	5.9	1002.
	3.6	2.0	655	237	5.5	8.2			
40.000							-32.2	3.9	1224.
	1.6	1.3	658	180	2.4	7.4			
45.000							-33.8	2.6	1356.
	-1.4	.8	683	139	-2.0	5.7			
50.000							-32.4	1.8	1354.
	-4.7	.5	719	105	-6.5	4.7			
55.000							-27.7	1.3	1198.
	-7.4	.6	759	78	-9.8	7.2			
60.000							-20.3	.7	917.
	-9.6	.5	801	56	-11.9	8.2			
65.000							-10.7	.3	534.
	-7.5	.2	478	35	-15.7	6.7			
70.000							-3.2	.0	164.
	-3.2	.0	154	13	-20.8	2.4			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 130 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-11.7	21.4	-365.
	-.5	.4	579	213	-.9	1.7			
5.000							-11.2	21.0	-314.
	.3	1.3	594	243	.5	5.3			
10.000							-11.5	19.7	-229.
	1.6	1.6	612	291	2.7	5.4			
15.000							-13.1	18.2	-82.
	1.3	2.3	653	374	2.0	6.2			
20.000							-14.5	15.8	62.
	.7	3.0	639	443	1.1	6.8			
25.000							-15.2	12.8	212.
	1.7	3.3	630	455	2.6	7.2			
30.000							-16.8	9.6	394.
	3.6	3.3	656	364	5.5	9.2			
35.000							-20.4	6.2	615.
	3.0	2.2	655	237	4.6	9.3			
40.000							-23.5	4.0	822.
	2.0	1.5	658	180	3.0	8.4			
45.000							-25.5	2.5	979.
	-.3	.8	683	139	-.4	6.1			
50.000							-25.2	1.7	1030.
	-3.1	.5	719	105	-4.3	5.0			
55.000							-22.1	1.1	947.
	-5.2	.5	759	78	-6.8	6.1			
60.000							-16.9	.7	766.
	-7.2	.4	801	56	-8.9	7.3			
65.000							-9.7	.2	487.
	-6.7	.2	478	35	-14.0	5.5			
70.000							-3.1	.1	157.
	-3.1	.1	154	13	-19.8	4.1			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 140 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-13.4	23.9	-526.
	-.2	.5	579	213	-.4	2.2			
5.000							-13.2	23.5	-444.
	-.1	1.3	594	243	-.2	5.4			
10.000							-13.0	22.2	-358.
	.8	1.5	612	291	1.3	5.3			
15.000							-13.8	20.6	-226.
	.1	2.6	653	374	.1	6.8			
20.000							-13.9	18.1	-115.
	-1.7	3.7	639	443	-2.6	8.3			
25.000							-12.3	14.4	-39.
	-1.0	3.9	630	455	-1.6	8.6			
30.000							-11.3	10.5	54.
	1.7	3.7	656	364	2.6	10.3			
35.000							-13.0	6.7	209.
	2.1	2.3	655	237	3.2	9.9			
40.000							-15.1	4.4	390.
	1.9	1.5	658	180	2.9	8.6			
45.000							-17.0	2.8	555.
	.4	1.0	683	139	.6	7.0			
50.000							-17.4	1.9	650.
	-1.6	.7	719	105	-2.2	6.5			
55.000							-15.8	1.2	643.
	-3.4	.5	759	78	-4.5	6.8			
60.000							-12.4	.6	546.
	-5.4	.5	801	56	-6.7	8.2			
65.000							-7.0	.2	351.
	-4.9	.2	478	35	-10.3	4.4			
70.000							-2.1	.0	111.
	-2.1	.0	154	13	-13.7	1.8			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 150 CONFIGURATION B REFERENCE PRESSURE 17 0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-15.0	24.8	-615.
5.000	.5	.5	579	213	.8	2.5	-15.4	24.2	-496.
10.000	-.3	1.2	594	243	-.4	4.8	-15.2	23.1	-406.
15.000	.0	1.3	612	291	.0	4.6	-15.2	21.7	-297.
20.000	-.9	2.7	653	374	-1.4	7.3	-14.2	19.0	-221.
25.000	-3.7	4.1	639	443	-5.7	9.3	-10.6	14.9	-219.
30.000	-3.3	4.4	630	455	-5.3	9.6	-7.2	10.5	-212.
35.000	-.1	4.0	656	364	-.1	10.9	-7.1	6.5	-124.
40.000	.9	2.2	655	237	1.4	9.4	-8.0	4.3	17.
45.000	1.2	1.5	658	180	1.9	8.2	-9.3	2.8	162.
50.000	.7	1.0	683	139	1.0	7.3	-10.0	1.8	280.
55.000	-.5	.8	719	105	-.7	8.0	-9.4	1.0	334.
60.000	-1.8	.5	759	78	-2.3	5.9	-7.7	.5	319.
65.000	-3.2	.4	801	56	-4.0	7.0	-4.5	.1	224.
70.000	-3.1	.1	478	35	-6.5	3.1	-1.4	.0	76.
75.600	-1.4	.0	154	13	-9.0	.6	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 160 CONFIGURATION B REFERENCE PRESSURE 17.9 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-14.8	22.5	-619.
5.000	-.1	.4	579	213	-.2	2.0	-14.7	22.0	-518.
10.000	-1.0	1.0	594	243	-1.7	4.1	-13.7	21.0	-452.
15.000	-.8	1.2	612	291	-1.3	4.0	-12.9	19.9	-372.
20.000	-1.8	2.5	653	374	-2.8	6.7	-11.1	17.4	-320.
25.000	-4.9	4.0	639	443	-7.7	9.1	-6.1	13.3	-359.
30.000	-4.5	4.3	630	455	-7.2	9.4	-1.6	9.0	-395.
35.000	-.4	3.7	656	364	-.6	10.1	-1.2	5.4	-321.
40.000	.9	1.9	655	237	1.3	8.1	-2.1	3.4	-189.
45.000	1.4	1.2	658	180	2.2	6.6	-3.5	2.2	-44.
50.000	1.2	.8	683	139	1.8	5.8	-4.8	1.4	87.
55.000	.4	.7	719	105	.5	7.1	-5.1	.7	168.
60.000	-.4	.3	759	78	-.6	4.0	-4.7	.4	199.
65.000	-1.3	.3	801	56	-1.7	5.1	-3.4	.1	172.
70.000	-2.2	.1	478	35	-4.6	1.7	-1.2	.0	64.
75.600	-1.2	.0	154	13	-7.5	2.6	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 170 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-17.5	20.1	-478.
5.000	-.5	.3	579	213	-.8	1.5	-17.0	19.7	-392.
10.000	-1.8	.8	594	243	-3.1	3.4	-15.2	18.9	-356.
15.000	-1.8	1.0	612	291	-2.9	3.4	-13.5	17.9	-308.
20.000	-2.6	2.3	653	374	-4.0	6.0	-10.9	15.7	-278.
25.000	-6.0	3.9	639	443	-9.4	8.7	-4.8	11.8	-354.
30.000	-5.6	4.1	630	455	-9.0	9.0	.8	7.7	-435.
35.000	-1.1	3.4	656	364	-1.7	9.3	1.9	4.3	-389.
40.000	.6	1.7	655	237	.9	7.0	1.3	2.7	-273.
45.000	1.1	1.0	658	180	1.6	5.5	.3	1.7	-149.
50.000	1.3	.6	683	139	1.9	4.5	-1.0	1.0	-29.
55.000	.9	.6	719	105	1.3	5.8	-1.9	.4	58.
60.000	.4	.2	759	78	.5	2.7	-2.3	.2	107.
65.000	-.3	.2	801	56	-.3	2.9	-2.1	.1	109.
70.000	-1.3	.0	478	35	-2.8	.4	-.7	.0	42.
75.600	-.7	.0	154	13	-4.7	3.4	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 180 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-15.1	18.8	-606.
5.000	-.6	.3	579	213	-1.1	1.4	-14.5	18.5	-529.
10.000	-2.1	.8	594	243	-3.5	3.3	-12.4	17.7	-503.
15.000	-2.1	.9	612	291	-3.5	3.1	-10.3	16.8	-469.
20.000	-3.2	1.9	653	374	-4.8	5.1	-7.1	14.9	-458.
25.000	-6.4	3.6	639	443	-10.0	8.2	-.7	11.3	-548.
30.000	-5.8	4.0	630	455	-9.3	8.8	5.1	7.2	-638.
35.000	-1.2	3.3	656	364	-1.9	9.0	6.3	4.0	-596.
40.000	.5	1.6	655	237	.8	7.0	5.8	2.3	-481.
45.000	1.4	1.0	658	180	2.1	5.4	4.4	1.4	-341.
50.000	1.7	.6	683	139	2.6	4.1	2.7	.8	-199.
55.000	1.3	.6	719	105	1.9	5.2	1.4	.2	-96.
60.000	1.1	.1	759	78	1.4	1.8	.3	.1	-20.
65.000	.8	.1	801	56	1.0	1.4	-.5	.0	29.
70.000	-.3	-.0	478	35	-.6	-.4	-.2	.0	15.
75.600	-.2	.0	154	13	-1.3	2.5	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 190 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-17.5	20.1	-478.
5.000	-.5	.3	579	213	-.8	1.5	-17.0	19.7	-392.
10.000	-1.8	.8	594	243	-3.1	3.4	-15.2	18.9	-356.
15.000	-1.8	1.0	612	291	-2.9	3.4	-13.5	17.9	-308.
20.000	-2.6	2.3	653	374	-4.0	6.0	-10.9	15.7	-278.
25.000	-6.0	3.9	639	443	-9.4	8.7	-4.8	11.8	-354.
30.000	-5.6	4.1	630	455	-9.0	9.0	.8	7.7	-435.
35.000	-1.1	3.4	656	364	-1.7	9.3	1.9	4.3	-389.
40.000	.6	1.7	655	237	.9	7.0	1.3	2.7	-273.
45.000	1.1	1.0	658	180	1.6	5.5	.3	1.7	-149.
50.000	1.3	.6	683	139	1.9	4.5	-1.0	1.0	-29.
55.000	.9	.6	719	105	1.3	5.8	-1.9	.4	58.
60.000	.4	.2	759	78	.5	2.7	-2.3	.2	107.
65.000	-.3	.2	801	56	-.3	2.9	-2.1	.1	109.
70.000	-1.3	.0	478	35	-2.8	.4	-.7	.0	42.
75.600	-.7	.0	154	13	-4.7	3.4	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 200 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-14.8	22.5	-619.
	-.1	.4	579	213	-.2	2.0			
5.000							-14.7	22.0	-518.
	-1.0	1.0	594	243	-1.7	4.1			
10.000							-13.7	21.0	-452.
	-.8	1.2	612	291	-1.3	4.0			
15.000							-12.9	19.9	-372.
	-1.8	2.5	653	374	-2.8	6.7			
20.000							-11.1	17.4	-320.
	-4.9	4.0	639	443	-7.7	9.1			
25.000							-6.1	13.3	-359.
	-4.5	4.3	630	455	-7.2	9.4			
30.000							-1.6	9.0	-395.
	-.4	3.7	656	364	-.6	10.1			
35.000							-1.2	5.4	-321.
	.9	1.9	655	237	1.3	8.1			
40.000							-2.1	3.4	-189.
	1.4	1.2	658	180	2.2	6.6			
45.000							-3.5	2.2	-44.
	1.2	.8	683	139	1.8	5.8			
50.000							-4.8	1.4	87.
	.4	.7	719	105	.5	7.1			
55.000							-5.1	.7	168.
	-.4	.3	759	78	-.6	4.0			
60.000							-4.7	.4	199.
	-1.3	.3	801	56	-1.7	5.1			
65.000							-3.4	.1	172.
	-2.2	.1	478	35	-4.6	1.7			
70.000							-1.2	.0	64.
	-1.2	.0	154	13	-7.5	2.6			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 210 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-15.0	24.8	-615.
5.000	.5	.5	579	213	.8	2.5	-15.4	24.2	-496.
10.000	-.3	1.2	594	243	-.4	4.8	-15.2	23.1	-406.
15.000	.0	1.3	612	291	.0	4.6	-15.2	21.7	-297.
20.000	-.9	2.7	653	374	-1.4	7.3	-14.2	19.0	-221.
25.000	-3.7	4.1	639	443	-5.7	9.3	-10.6	14.9	-219.
30.000	-3.3	4.4	630	455	-5.3	9.6	-7.2	10.5	-212.
35.000	-.1	4.0	656	364	-.1	10.9	-7.1	6.5	-124.
40.000	.9	2.2	655	237	1.4	9.4	-8.0	4.3	17.
45.000	1.2	1.5	658	180	1.9	8.2	-9.3	2.8	162.
50.000	.7	1.0	683	139	1.0	7.3	-10.0	1.8	280.
55.000	-.5	.8	719	105	-.7	8.0	-9.4	1.0	334.
60.000	-1.8	.5	759	78	-2.3	5.9	-7.7	.5	319.
65.000	-3.2	.4	801	56	-4.0	7.0	-4.5	.1	224.
70.000	-3.1	.1	478	35	-6.5	3.1	-1.4	.0	76.
75.600	-1.4	.0	154	13	-9.0	.6	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 220 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-13.4	23.9	-526.
5.000	-.2	.5	579	213	-.4	2.2	-13.2	23.5	-444
10.000	-.1	1.3	594	243	-.2	5.4	-13.0	22.2	-358.
15.000	.8	1.5	612	291	1.3	5.3	-13.8	20.6	-226.
20.000	.1	2.6	653	374	.1	6.8	-13.9	18.1	-115.
25.000	-1.7	3.7	639	443	-2.6	8.3	-12.3	14.4	-39.
30.000	-1.0	3.9	630	455	-1.6	8.6	-11.3	10.5	54.
35.000	1.7	3.7	656	364	2.6	10.3	-13.0	6.7	209.
40.000	2.1	2.3	655	237	3.2	9.9	-15.1	4.4	390.
45.000	1.9	1.5	658	180	2.9	8.6	-17.0	2.8	555.
50.000	.4	1.0	683	139	.6	7.0	-17.4	1.9	650.
55.000	-1.6	.7	719	105	-2.2	6.5	-15.8	1.2	643.
60.000	-3.4	.5	759	78	-4.5	6.8	-12.4	.6	546.
65.000	-5.4	.5	801	56	-6.7	8.2	-7.0	.2	351.
70.000	-4.9	.2	478	35	-10.3	4.4	-2.1	.0	111.
75.600	-2.1	.0	154	13	-13.7	1.8	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 230 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-11.7	21.4	-365.
5.000	-.5	.4	579	213	-.9	1.7	-11.2	21.0	-314
10.000	.3	1.3	594	243	.5	5.3	-11.5	19.7	-229.
15.000	1.6	1.6	612	291	2.7	5.4	-13.1	18.2	-82.
20.000	1.3	2.3	653	374	2.0	6.2	-14.5	15.8	62.
25.000	.7	3.0	639	443	1.1	6.8	-15.2	12.8	212.
30.000	1.7	3.3	630	455	2.6	7.2	-16.8	9.6	394.
35.000	3.6	3.3	656	364	5.5	9.2	-20.4	6.2	615.
40.000	3.0	2.2	655	237	4.6	9.3	-23.5	4.0	822.
45.000	2.0	1.5	658	180	3.0	8.4	-25.5	2.5	979.
50.000	-.3	.8	683	139	-.4	6.1	-25.2	1.7	1030.
55.000	-3.1	.5	719	105	-4.3	5.0	-22.1	1.1	947.
60.000	-5.2	.5	759	78	-6.8	6.1	-16.9	.7	766.
65.000	-7.2	.4	801	56	-8.9	7.3	-9.7	.2	487.
70.000	-6.7	.2	478	35	-14.0	5.5	-3.1	.1	157.
75.600	-3.1	.1	154	13	-19.8	4.1	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 240 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-14.7	17.2	-71.
5.000	-.7	.4	579	213	-1.3	1.7	-14.0	16.9	-42.
10.000	.5	1.2	594	243	.8	4.9	-14.4	15.7	32.
15.000	1.9	1.4	612	291	3.1	4.8	-16.3	14.3	168.
20.000	1.6	1.7	653	374	2.5	4.5	-17.9	12.6	302.
25.000	2.1	2.0	639	443	3.3	4.4	-20.1	10.6	487.
30.000	3.5	2.2	630	455	5.6	4.8	-23.6	8.4	729.
35.000	5.0	2.6	656	364	7.6	7.0	-28.6	5.9	1002.
40.000	3.6	2.0	655	237	5.5	8.2	-32.2	3.9	1224.
45.000	1.6	1.3	658	180	2.4	7.4	-33.8	2.6	1356.
50.000	-1.4	.8	683	139	-2.0	5.7	-32.4	1.8	1354.
55.000	-4.7	.5	719	105	-6.5	4.7	-27.7	1.3	1198.
60.000	-7.4	.6	759	78	-9.8	7.2	-20.3	.7	917.
65.000	-9.6	.5	801	56	-11.9	8.2	-10.7	.3	534.
70.000	-7.5	.2	478	35	-15.7	6.7	-3.2	.0	164.
75.600	-3.2	.0	154	13	-20.8	2.4	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 250 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							-3.4	11.2	-194.
5.000	.4	.5	579	213	.7	2.2	-3.8	10.7	-141.
10.000	1.2	1.1	594	243	2.1	4.4	-5.0	9.7	-59.
15.000	2.3	1.2	612	291	3.8	4.1	-7.4	8.5	72.
20.000	2.4	.8	653	374	3.7	2.2	-9.8	7.6	215.
25.000	4.0	.9	639	443	6.2	2.1	-13.8	6.7	445.
30.000	5.8	1.2	630	455	9.2	2.7	-19.6	5.5	749.
35.000	6.7	1.4	656	364	10.2	3.9	-26.2	4.1	1073.
40.000	4.4	1.3	655	237	6.7	5.5	-30.6	2.8	1299.
45.000	1.7	.8	658	180	2.6	4.7	-32.3	1.9	1409.
50.000	-1.5	.5	683	139	-2.2	3.9	-30.7	1.4	1375.
55.000	-4.7	.2	719	105	-6.5	2.2	-26.0	1.1	1194.
60.000	-7.0	.5	759	78	-9.3	6.0	-19.0	.7	903.
65.000	-8.5	.4	801	56	-10.6	7.3	-10.5	.3	533.
70.000	-7.2	.2	478	35	-15.0	5.5	-3.4	.1	170.
75.600	-3.4	.1	154	13	-21.7	5.4	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 260 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							14.5	6.5	-574.
	1.9	.5	579	213	3.3	2.5			
5.000							12.6	6.0	-479.
	2.7	1.0	594	243	4.6	4.1			
10.000							9.9	5.0	-358.
	3.9	1.1	612	291	6.3	3.8			
15.000							6.0	3.9	-193.
	4.2	.5	653	374	6.4	1.2			
20.000							1.8	3.5	-8.
	6.2	.4	639	443	9.8	.9			
25.000							-4.4	3.0	280.
	8.1	.5	630	455	12.9	1.1			
30.000							-12.5	2.5	648.
	8.5	.3	656	364	12.9	.8			
35.000							-21.0	2.3	1022.
	5.4	.6	655	237	8.3	2.4			
40.000							-26.4	1.7	1263.
	2.2	.3	658	180	3.3	1.8			
45.000							-28.6	1.3	1364.
	-1.0	.2	683	139	-1.4	1.7			
50.000							-27.6	1.1	1327.
	-3.8	.0	719	105	-5.3	.2			
55.000							-23.8	1.1	1161.
	-6.2	.4	759	78	-8.2	5.5			
60.000							-17.6	.7	881.
	-7.3	.4	801	56	-9.1	7.0			
65.000							-10.3	.3	530.
	-6.8	.1	478	35	-14.3	4.2			
70.000							-3.5	.1	175.
	-3.5	.1	154	13	-22.5	8.3			
75.000							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 270 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							40.0	4.3	-1371.
	4.2	.6	579	213	7.2	3.0			
5.000							35.8	3.7	-1201.
	4.7	.9	594	243	8.0	3.8			
10.000							31.1	2.8	-1014.
	6.0	1.1	612	291	9.8	3.6			
15.000							25.1	1.7	-785.
	7.1	.5	653	374	10.9	1.2			
20.000							17.9	1.2	-503.
	9.2	.7	639	443	14.4	1.7			
25.000							8.7	.5	-126.
	10.7	.6	630	455	17.0	1.3			
30.000							-2.0	-.1	315.
	10.4	-.6	656	364	15.8	-1.6			
35.000							-12.3	.5	751.
	7.1	-.0	655	237	10.8	-.1			
40.000							-19.4	.5	1043.
	3.4	-.1	658	180	5.1	-.6			
45.000							-22.8	.6	1179.
	.3	-.0	683	139	.4	-.2			
50.000							-23.1	.7	1180.
	-2.5	-.2	719	105	-3.4	-1.6			
55.000							-20.6	.8	1058.
	-4.6	.3	759	78	-6.1	3.7			
60.000							-16.0	.5	834.
	-5.4	.3	801	56	-6.8	4.7			
65.000							-10.6	.3	551.
	-6.7	.1	478	35	-14.0	3.2			
70.000							-3.9	.2	197.
	-3.9	.2	154	13	-25.2	12.1			
75.000							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 280 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							75.1	2.3	-2755.
	6.6	.9	579	213	11.4	4.3			
5.000							68.5	1.4	-2489.
	6.7	.9	594	243	11.3	3.9			
10.000							61.8	.4	-2228.
	8.1	1.1	612	291	13.2	3.7			
15.000							53.7	-.7	-1924.
	9.8	.3	653	374	15.0	.8			
20.000							43.8	-1.0	-1541.
	11.6	.8	639	443	18.1	1.7			
25.000							32.3	-1.7	-1091.
	12.8	.6	630	455	20.4	1.4			
30.000							19.4	-2.3	-585.
	12.8	-1.0	656	364	19.5	-2.7			
35.000							6.6	-1.4	-52.
	9.9	-.5	655	237	15.2	-2.1			
40.000							-3.3	-.9	355.
	6.2	-.6	658	180	9.4	-3.1			
45.000							-9.5	-.3	608.
	3.2	-.3	683	139	4.7	-2.2			
50.000							-12.7	.0	730.
	.5	-.3	719	105	.7	-3.2			
55.000							-13.1	.4	731.
	-1.6	.1	759	78	-2.1	.8			
60.000							-11.6	.3	635.
	-2.5	.1	801	56	-3.1	1.0			
65.000							-9.1	.2	479.
	-5.4	.1	478	35	-11.4	1.7			
70.000							-3.7	.2	186.
	-3.7	.2	154	13	-23.8	13.6			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 290 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							117.4	-.0	-4413.
	8.0	1.0	579	213	13.8	4.5			
5.000							109.4	-1.0	-4105.
	8.4	1.1	594	243	14.1	4.5			
10.000							101.0	-2.1	-3792.
	10.3	1.3	612	291	16.8	4.5			
15.000							90.8	-3.3	-3419.
	12.5	.3	653	374	19.1	.9			
20.000							78.3	-3.7	-2949.
	13.7	.7	639	443	21.4	1.7			
25.000							64.6	-4.4	-2438.
	15.0	.4	630	455	23.7	.8			
30.000							49.7	-4.8	-1865.
	15.7	-1.7	656	364	24.0	-4.6			
35.000							33.9	-3.1	-1220.
	13.3	-1.1	655	237	20.3	-4.6			
40.000							20.7	-2.0	-680.
	9.5	-1.1	658	180	14.4	-5.9			
45.000							11.2	-.9	-292.
	6.8	-.6	683	139	9.9	-4.1			
50.000							4.4	-.4	-18.
	4.4	-.4	719	105	6.1	-3.7			
55.000							.0	.0	156.
	2.6	-.1	759	78	3.4	-1.1			
60.000							-2.6	.1	233.
	2.2	-.0	801	56	2.7	-.6			
65.000							-4.8	.1	264.
	-2.3	-.0	478	35	-4.8	-1.3			
70.000							-2.5	.2	124.
	-2.5	.2	154	13	-16.0	13.7			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 300 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							155.3	-2.4	-5754.
	9.6	1.0	579	213	16.6	4.9			
5.000							145.6	-3.4	-5395.
	10.2	1.3	594	243	17.2	5.4			
10.000							135.4	-4.7	-5027.
	12.6	1.6	612	291	20.6	5.5			
15.000							122.8	-6.3	-4579.
	15.3	.6	653	374	23.4	1.5			
20.000							107.6	-6.9	-4024.
	15.5	.6	639	443	24.2	1.4			
25.000							92.1	-7.5	-3472.
	16.5	-.2	630	455	26.2	-.5			
30.000							75.6	-7.3	-2863.
	17.8	-2.3	656	364	27.2	-6.3			
35.000							57.8	-5.0	-2149.
	16.0	-1.7	655	237	24.4	-7.2			
40.000							41.8	-3.3	-1513.
	12.7	-1.5	658	180	19.2	-8.5			
45.000							29.1	-1.7	-1002.
	10.1	-.9	683	139	14.9	-6.2			
50.000							19.0	-.9	-595.
	7.9	-.5	719	105	10.9	-5.0			
55.000							11.1	-.4	-284.
	6.5	-.3	759	78	8.5	-3.5			
60.000							4.6	-.1	-60.
	6.6	-.2	801	56	8.2	-2.8			
65.000							-1.9	.1	130.
	-.1	-.2	478	35	-.2	-4.5			
70.000							-1.9	.2	90.
	-1.9	.2	154	13	-12.0	17.3			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 310 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							187.2	-4.5	-6870.
	11.8	1.3	579	213	20.4	6.0			
5.000							175.4	-5.8	-6434.
	12.3	1.6	594	243	20.7	6.8			
10.000							163.1	-7.4	-5999.
	15.0	2.1	612	291	24.4	7.1			
15.000							148.2	-9.5	-5482.
	17.8	.9	653	374	27.3	2.5			
20.000							130.3	-10.4	-4856.
	16.9	.4	639	443	26.4	.9			
25.000							113.5	-10.8	-4283.
	17.7	-1.1	630	455	28.1	-2.5			
30.000							95.7	-9.7	-3652.
	19.9	-3.2	656	364	30.4	-8.7			
35.000							75.8	-6.5	-2876.
	18.5	-2.4	655	237	28.2	-10.1			
40.000							57.3	-4.1	-2151.
	15.4	-2.0	658	180	23.5	-10.8			
45.000							41.9	-2.1	-1536.
	13.2	-1.0	683	139	19.3	-7.4			
50.000							28.7	-1.1	-1006.
	10.8	-.5	719	105	15.1	-4.9			
55.000							17.8	-.6	-570.
	9.1	-.4	759	78	12.0	-5.0			
60.000							8.7	-.2	-240.
	8.6	-.2	801	56	10.7	-4.3			
65.000							.1	.0	28.
	1.2	-.2	478	35	2.6	-5.9			
70.000							-1.1	.2	50.
	-1.1	.2	154	13	-7.3	17.1			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 320 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							210.4	-5.0	-7616.
	14.9	1.6	579	213	25.7	7.6			
5.000							195.5	-6.6	-7067.
	15.0	2.2	594	243	25.3	8.9			
10.000							180.5	-8.8	-6542.
	17.5	2.7	612	291	28.6	9.4			
15.000							163.0	-11.5	-5950.
	19.9	1.6	653	374	30.5	4.2			
20.000							143.0	-13.1	-5275.
	17.5	.2	639	443	27.3	.4			
25.000							125.5	-13.3	-4716.
	17.8	-2.0	630	455	28.2	-4.3			
30.000							107.8	-11.3	-4111.
	20.9	-3.6	656	364	31.9	-9.8			
35.000							86.9	-7.7	-3317.
	19.8	-2.9	655	237	30.2	-12.4			
40.000							67.1	-4.8	-2553.
	17.4	-2.2	658	180	26.4	-12.3			
45.000							49.7	-2.6	-1868.
	15.3	-1.2	683	139	22.5	-8.4			
50.000							34.4	-1.4	-1259.
	12.9	-.6	719	105	18.0	-5.4			
55.000							21.4	-.9	-746.
	10.6	-.5	759	78	14.0	-6.4			
60.000							10.8	-.4	-357.
	8.8	-.3	801	56	11.0	-5.8			
65.000							2.0	-.0	-75.
	2.2	-.2	478	35	4.5	-6.2			
70.000							-.1	.2	-2.
	-.1	.2	154	13	-.8	13.6			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 330 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							228.1	-5.9	-8181.
	17.6	1.8	579	213	30.4	8.4			
5.000							210.5	-7.7	-7538.
	17.3	2.5	594	243	29.2	10.3			
10.000							193.2	-10.2	-6943.
	19.5	3.2	612	291	31.9	11.1			
15.000							173.7	-13.4	-6302.
	21.4	1.9	653	374	32.7	5.1			
20.000							152.3	-15.3	-5602.
	17.6	-.2	639	443	27.6	-.5			
25.000							134.7	-15.1	-5064.
	17.6	-2.7	630	455	27.9	-5.8			
30.000							117.1	-12.4	-4484.
	21.6	-3.7	656	364	33.0	-10.3			
35.000							95.5	-8.7	-3675.
	20.9	-3.3	655	237	31.9	-14.0			
40.000							74.6	-5.4	-2873.
	19.0	-2.5	658	180	28.8	-13.9			
45.000							55.6	-2.9	-2126.
	17.0	-1.2	683	139	24.9	-8.7			
50.000							38.6	-1.6	-1456.
	14.3	-.6	719	105	19.8	-5.8			
55.000							24.3	-1.0	-897.
	11.5	-.6	759	78	15.1	-7.3			
60.000							12.9	-.5	-474.
	8.7	-.4	801	56	10.8	-6.7			
65.000							4.2	-.1	-189.
	3.2	-.2	478	35	6.7	-6.4			
70.000							1.0	.1	-58.
	1.0	.1	154	13	6.3	9.3			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 340 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							239.3	-7.2	-8433.
	19.2	1.8	579	213	33.2	8.4			
5.000							220.1	-9.0	-7746.
	18.7	2.7	594	243	31.4	11.1			
10.000							201.4	-11.7	-7122.
	20.4	3.5	612	291	33.3	12.1			
15.000							181.0	-15.2	-6474.
	21.4	2.0	653	374	32.8	5.3			
20.000							159.6	-17.2	-5807.
	17.2	-.8	639	443	27.0	-1.7			
25.000							142.3	-16.5	-5310.
	17.3	-3.3	630	455	27.5	-7.4			
30.000							125.0	-13.1	-4763.
	22.1	-3.9	656	364	33.8	-10.7			
35.000							102.9	-9.2	-3952.
	21.4	-3.5	655	237	32.6	-14.9			
40.000							81.5	-5.7	-3145.
	19.9	-2.6	658	180	30.3	-14.5			
45.000							61.6	-3.1	-2366.
	17.9	-1.3	683	139	26.2	-9.1			
50.000							43.7	-1.8	-1668.
	14.8	-.6	719	105	20.6	-5.6			
55.000							28.8	-1.2	-1097.
	12.1	-.6	759	78	15.9	-7.8			
60.000							16.7	-.6	-656.
	9.4	-.4	801	56	11.8	-7.4			
65.000							7.3	-.2	-347.
	5.0	-.3	478	35	10.6	-7.8			
70.000							2.3	.1	-124.
	2.3	.1	154	13	14.6	6.7			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 350 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Y-COORDINATE FEET	Z-FORCE KIPS	X-FORCE KIPS	Z-AREA SQ FT	X-AREA SQ FT	Z-PRESS PSF	X-PRESS PSF	Z-SHEAR KIPS	X-SHEAR KIPS	Y-MOMENT FT-KIPS
0.000							246.7	-6.5	-8515.
	20.5	1.9	579	213	35.3	8.8			
5.000							226.2	-8.4	-7792.
	19.4	2.8	594	243	32.7	11.7			
10.000							206.8	-11.2	-7153.
	20.9	3.7	612	291	34.1	12.9			
15.000							185.9	-15.0	-6506.
	21.4	2.5	653	374	32.8	6.7			
20.000							164.4	-17.5	-5867.
	17.0	-.5	639	443	26.6	-1.1			
25.000							147.4	-17.0	-5411.
	17.0	-3.4	630	455	27.0	-7.4			
30.000							130.4	-13.6	-4901.
	22.2	-3.9	656	364	33.9	-10.8			
35.000							108.2	-9.7	-4103.
	21.2	-3.8	655	237	32.4	-16.1			
40.000							87.0	-5.9	-3311.
	19.7	-2.7	658	180	29.9	-14.7			
45.000							67.3	-3.2	-2553.
	17.9	-1.2	683	139	26.1	-8.9			
50.000							49.4	-2.0	-1869.
	14.8	-.6	719	105	20.6	-5.6			
55.000							34.6	-1.4	-1316.
	12.7	-.7	759	78	16.7	-8.7			
60.000							21.9	-.7	-872.
	10.8	-.5	801	56	13.4	-8.1			
65.000							11.2	-.3	-535.
	7.5	-.4	478	35	15.6	-10.6			
70.000							3.7	.1	-198.
	3.7	.1	154	13	23.9	6.2			
75.600							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 0 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-64.7	0.0	0.
	-6.3	0.0	295	409	-21.3	0.0			
5.000							-58.4	0.0	0.
	-15.4	0.0	693	623	-22.2	0.0			
10.000							-43.1	0.0	0.
	-18.1	0.0	816	539	-22.1	0.0			
15.000							-25.0	0.0	0.
	-13.9	0.0	767	555	-18.1	0.0			
20.000							-11.1	0.0	0.
	-6.5	0.0	480	442	-13.6	0.0			
25.000							-4.6	0.0	0.
	-4.6	0.0	176	173	-25.9	0.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 10 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-62.6	1.4	56.
	-6.0	-1.6	295	409	-20.4	-3.8			
5.000							-56.6	2.9	96.
	-15.4	.7	693	623	-22.3	1.1			
10.000							-41.1	2.3	49.
	-17.8	1.1	816	539	-21.8	2.0			
15.000							-23.4	1.2	24.
	-13.0	.9	767	555	-17.0	1.6			
20.000							-10.3	.3	29.
	-6.0	.9	480	442	-12.5	1.9			
25.000							-4.3	-.6	-17.
	-4.3	-.6	176	173	-24.6	-3.3			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 20 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-58.9	4.9	228.
	-5.2	-1.3	295	409	-17.6	-3.2			
5.000							-53.7	6.2	260.
	-14.7	1.4	693	623	-21.2	2.2			
10.000							-39.0	4.8	181.
	-16.6	1.7	816	539	-20.3	3.2			
15.000							-22.4	3.1	139.
	-12.5	1.9	767	555	-16.3	3.4			
20.000							-9.9	1.2	93.
	-6.0	1.8	480	442	-12.4	4.1			
25.000							-3.9	-.6	-14.
	-3.9	-.6	176	173	-22.4	-3.4			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 30 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-52.8	10.1	427.
	-4.7	-.8	295	409	-16.0	-1.9			
5.000							-48.1	10.9	428.
	-13.3	2.4	693	623	-19.2	3.9			
10.000							-34.8	8.4	310.
	-14.4	2.7	816	539	-17.7	5.0			
15.000							-20.4	5.7	252.
	-11.5	2.8	767	555	-15.0	5.1			
20.000							-8.9	2.9	172.
	-5.5	2.9	480	442	-11.5	6.5			
25.000							-3.4	.0	17.
	-3.4	.0	176	173	-19.1	.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 40 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-45.9	14.9	700.
	-4.8	-.7	295	409	-16.3	-1.8			
5.000							-41.1	15.7	678.
	-12.0	3.2	693	623	-17.4	5.1			
10.000							-29.1	12.5	516.
	-12.2	3.6	816	539	-14.9	6.6			
15.000							-16.9	9.0	415.
	-9.5	4.0	767	555	-12.4	7.2			
20.000							-7.4	4.9	274.
	-4.7	4.0	480	442	-9.8	9.0			
25.000							-2.7	1.0	58
	-2.7	1.0	176	173	-15.3	5.5			
28.320							0.0	0.0	0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 50 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-38.2	19.0	997.
	-4.9	-.7	295	409	-16.7	-1.8			
5.000							-33.2	19.8	946.
	-10.6	4.4	693	623	-15.4	7.0			
10.000							-22.6	15.4	705.
	-9.6	4.5	816	539	-11.8	8.3			
15.000							-13.0	10.9	533.
	-7.9	4.9	767	555	-10.3	8.8			
20.000							-5.1	6.0	321.
	-3.7	4.1	480	442	-7.7	9.4			
25.000							-1.4	1.9	91.
	-1.4	1.9	176	173	-8.0	11.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 60 CONFIGURATION B REFERENCE PRESSURE 17.9 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-29.1	23.5	1239.
	-4.5	.0	295	409	-15.3	.0			
5.000							-24.6	23.5	1163.
	-8.8	5.5	693	623	-12.7	8.8			
10.000							-15.7	18.0	857.
	-7.1	5.1	816	539	-8.7	9.4			
15.000							-8.6	12.9	642.
	-5.9	5.6	767	555	-7.6	10.1			
20.000							-2.7	7.3	371.
	-2.4	4.6	480	442	-5.0	10.4			
25.000							-.3	2.7	120.
	-.3	2.7	176	173	-2.0	15.7			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 70 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-20.4	28.9	1474.
	-3.4	1.6	295	409	-11.7	3.8			
5.000							-16.9	27.4	1323.
	-7.0	7.0	693	623	-10.1	11.2			
10.000							-9.9	20.4	961.
	-4.9	5.7	816	539	-5.9	10.6			
15.000							-5.1	14.7	709.
	-3.9	6.1	767	555	-5.1	11.0			
20.000							-1.2	8.5	401.
	-1.3	5.1	480	442	-2.7	11.5			
25.000							.2	3.5	146.
	.2	3.5	176	173	.9	20.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 80 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-12.9	32.4	1573.
	-2.1	3.5	295	409	-7.1	8.5			
5.000							-10.8	28.9	1362.
	-5.1	8.4	693	623	-7.3	13.4			
10.000							-5.7	20.6	981.
	-3.0	6.0	816	539	-3.7	11.0			
15.000							-2.7	14.6	731.
	-2.4	6.2	767	555	-3.1	11.1			
20.000							-.3	8.5	398.
	-.6	5.0	480	442	-1.2	11.2			
25.000							.3	3.5	141.
	.3	3.5	176	173	1.5	20.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 90 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-5.4	35.0	1525.
	-.4	5.5	295	409	-1.5	13.5			
5.000							-4.9	29.5	1262.
	-2.8	9.6	693	623	-4.0	15.4			
10.000							-2.2	19.9	881.
	-1.6	6.3	816	539	-2.0	11.6			
15.000							-.5	13.7	651.
	-.6	6.0	767	555	-.7	10.8			
20.000							.0	7.6	341.
	-.0	4.6	480	442	-.0	10.5			
25.000							.1	3.0	112.
	.1	3.0	176	173	.3	17.3			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 100 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							3.7	37.0	1470.
	1.0	6.2	295	409	3.4	15.1			
5.000							2.7	30.8	1196.
	.3	9.9	693	623	.5	15.9			
10.000							2.3	20.9	851.
	.4	6.7	816	539	.5	12.4			
15.000							1.9	14.2	636.
	1.4	6.4	767	555	1.8	11.6			
20.000							.5	7.8	329.
	.7	4.9	480	442	1.6	11.0			
25.000							-.2	2.9	108.
	-.2	2.9	176	173	-1.3	16.9			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 110 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							14.7	37.0	1325.
	2.2	6.2	295	409	7.4	15.2			
5.000							12.5	30.8	1066.
	3.7	10.1	693	623	5.4	16.2			
10.000							8.8	20.7	750.
	3.4	7.3	816	539	4.2	13.5			
15.000							5.4	13.5	548.
	3.6	6.5	767	555	4.7	11.7			
20.000							1.7	7.0	271.
	1.9	4.5	480	442	4.0	10.2			
25.000							-.2	2.5	85.
	-.2	2.5	176	173	-1.2	14.4			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 120 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							25.1	33.8	1070.
	3.4	6.6	295	409	11.7	16.1			
5.000							21.6	27.2	793.
	6.3	9.8	693	623	9.2	15.8			
10.000							15.3	17.4	536.
	6.0	6.5	816	539	7.3	12.1			
15.000							9.3	10.8	398.
	5.5	5.5	767	555	7.2	10.0			
20.000							3.8	5.3	186.
	3.4	3.7	480	442	7.2	8.5			
25.000							.3	1.6	45.
	.3	1.6	176	173	2.0	8.9			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 130 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							31.5	25.3	634.
	3.6	5.3	295	409	12.3	12.9			
5.000							27.9	20.0	433.
	7.7	7.2	693	623	11.1	11.6			
10.000							20.2	12.8	316.
	7.8	4.8	816	539	9.6	8.9			
15.000							12.4	8.0	260.
	6.8	4.3	767	555	8.8	7.7			
20.000							5.6	3.7	112.
	4.6	3.0	480	442	9.7	6.8			
25.000							1.0	.7	6.
	1.0	.7	176	173	5.6	4.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 140 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							37.2	19.1	348.
	4.0	4.2	295	409	13.6	10.3			
5.000							33.2	14.9	197.
	9.5	5.8	693	623	13.8	9.2			
10.000							23.6	9.2	138.
	9.3	3.8	816	539	11.4	7.0			
15.000							14.3	5.4	124.
	7.3	3.2	767	555	9.6	5.8			
20.000							7.0	2.2	37.
	5.4	2.3	480	442	11.2	5.2			
25.000							1.7	-.1	-30.
	1.7	-.1	176	173	9.4	-.5			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 150 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							39.8	14.2	157.
	4.3	3.6	295	409	14.7	8.8			
5.000							35.5	10.6	45.
	10.8	4.6	693	623	15.5	7.4			
10.000							24.7	6.0	5.
	10.2	3.0	816	539	12.5	5.5			
15.000							14.5	3.0	11.
	7.0	2.2	767	555	9.2	4.0			
20.000							7.5	.8	-25.
	5.5	1.4	480	442	11.5	3.2			
25.000							2.0	-.6	-51.
	2.0	-.6	176	173	11.3	-3.7			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 160 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							39.6	8.8	31.
	4.2	2.6	295	409	14.3	6.3			
5.000							35.4	6.2	-47.
	10.8	2.8	693	623	15.6	4.5			
10.000							24.6	3.4	-46.
	10.2	1.7	816	539	12.5	3.2			
15.000							14.3	1.7	-17.
	6.8	1.4	767	555	8.8	2.5			
20.000							7.6	.3	-30.
	5.5	.9	480	442	11.4	2.1			
25.000							2.1	-.6	-41.
	2.1	-.6	176	173	12.0	-3.4			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 170 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							38.7	4.0	-14.
	4.0	1.3	295	409	13.6	3.1			
5.000							34.7	2.8	-58.
	10.9	1.1	693	623	15.7	1.8			
10.000							23.8	1.6	-33.
	10.1	.7	816	539	12.4	1.3			
15.000							13.7	.9	-9.
	6.2	.6	767	555	8.1	1.1			
20.000							7.6	.3	-14.
	5.3	.5	480	442	10.9	1.1			
25.000							2.3	-.1	-16.
	2.3	-.1	176	173	13.1	-.8			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 180 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							38.5	0.0	0.
	3.7	0.0	295	409	12.7	0.0			
5.000							34.8	0.0	0.
	11.0	0.0	693	623	15.9	0.0			
10.000							23.8	0.0	0.
	10.2	0.0	816	539	12.5	0.0			
15.000							13.6	0.0	0.
	6.1	0.0	767	555	8.0	0.0			
20.000							7.4	0.0	0.
	5.2	0.0	480	442	10.8	0.0			
25.000							2.2	0.0	0.
	2.2	0.0	176	173	12.7	0.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 190 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							38.7	-4.0	14.
	4.0	-1.3	295	409	13.6	-3.1			
5.000							34.7	-2.8	58.
	10.9	-1.1	693	623	15.7	-1.8			
10.000							23.8	-1.6	33.
	10.1	-.7	816	539	12.4	-1.3			
15.000							13.7	-.9	9.
	6.2	-.6	767	555	8.1	-1.1			
20.000							7.6	-.3	14.
	5.3	-.5	480	442	10.9	-1.1			
25.000							2.3	.1	16.
	2.3	.1	176	173	13.1	.8			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 200 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							39.6	-8.8	-31.
	4.2	-2.6	295	409	14.3	-6.3			
5.000							35.4	-6.2	47.
	10.8	-2.8	693	623	15.6	-4.5			
10.000							24.6	-3.4	46.
	10.2	-1.7	816	539	12.5	-3.2			
15.000							14.3	-1.7	17.
	6.8	-1.4	767	555	8.8	-2.5			
20.000							7.6	-.3	30.
	5.5	-.9	480	442	11.4	-2.1			
25.000							2.1	.6	41.
	2.1	.6	176	173	12.0	3.4			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 210 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							39.8	-14.2	-157.
	4.3	-3.6	295	409	14.7	-8.8			
5.000							35.5	-10.6	-45.
	10.8	-4.6	693	623	15.5	-7.4			
10.000							24.7	-6.0	-5.
	10.2	-3.0	816	539	12.5	-5.5			
15.000							14.5	-3.0	-11.
	7.0	-2.2	767	555	9.2	-4.0			
20.000							7.5	-.8	25.
	5.5	-1.4	480	442	11.5	-3.2			
25.000							2.0	.6	51.
	2.0	.6	176	173	11.3	3.7			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 220 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							37.2	-19.1	-348.
	4.0	-4.2	295	409	13.6	-10.3			
5.000							33.2	-14.9	-197.
	9.5	-5.8	693	623	13.8	-9.2			
10.000							23.6	-9.2	-138.
	9.3	-3.8	816	539	11.4	-7.0			
15.000							14.3	-5.4	-124.
	7.3	-3.2	767	555	9.6	-5.8			
20.000							7.0	-2.2	-37.
	5.4	-2.3	480	442	11.2	-5.2			
25.000							1.7	.1	30.
	1.7	.1	176	173	9.4	.5			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 230 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							31.5	-25.3	-634.
	3.6	-5.3	295	409	12.3	-12.9			
5.000							27.9	-20.0	-433.
	7.7	-7.2	693	623	11.1	-11.6			
10.000							20.2	-12.8	-316.
	7.8	-4.8	816	539	9.6	-8.9			
15.000							12.4	-8.0	-260.
	6.8	-4.3	767	555	8.8	-7.7			
20.000							5.6	-3.7	-112.
	4.6	-3.0	480	442	9.7	-6.8			
25.000							1.0	-.7	-6.
	1.0	-.7	176	173	5.6	-4.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 240 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							25.1	-33.8	-1070.
	3.4	-6.6	295	409	11.7	-16.1			
5.000							21.6	-27.2	-793.
	6.3	-9.8	693	623	9.2	-15.8			
10.000							15.3	-17.4	-536.
	6.0	-6.5	816	539	7.3	-12.1			
15.000							9.3	-10.8	-398.
	5.5	-5.5	767	555	7.2	-10.0			
20.000							3.8	-5.3	-186.
	3.4	-3.7	480	442	7.2	-8.5			
25.000							.3	-1.6	-45.
	.3	-1.6	176	173	2.0	-8.9			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 250 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							14.7	-37.0	-1325.
	2.2	-6.2	295	409	7.4	-15.2			
5.000							12.5	-30.8	-1066.
	3.7	-10.1	693	623	5.4	-16.2			
10.000							8.8	-20.7	-750.
	3.4	-7.3	816	539	4.2	-13.5			
15.000							5.4	-13.5	-548.
	3.6	-6.5	767	555	4.7	-11.7			
20.000							1.7	-7.0	-271.
	1.9	-4.5	480	442	4.0	-10.2			
25.000							-.2	-2.5	-85.
	-.2	-2.5	176	173	-1.2	-14.4			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 260 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							3.7	-37.0	-1470.
	1.0	-6.2	295	409	3.4	-15.1			
5.000							2.7	-30.8	-1196.
	.3	-9.9	693	623	.5	-15.9			
10.000							2.3	-20.9	-851.
	.4	-6.7	816	539	.5	-12.4			
15.000							1.9	-14.2	-636.
	1.4	-6.4	767	555	1.8	-11.6			
20.000							.5	-7.8	-329.
	.7	-4.9	480	442	1.6	-11.0			
25.000							-.2	-2.9	-108.
	-.2	-2.9	176	173	-1.3	-16.9			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 270 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-5.4	-35.0	-1525.
5.000	-.4	-5.5	295	409	-1.5	-13.5	-4.9	-29.5	-1262.
10.000	-2.8	-9.6	693	623	-4.0	-15.4	-2.2	-19.9	-881.
15.000	-1.6	-6.3	816	539	-2.0	-11.6	-.5	-13.7	-651.
20.000	-.6	-6.0	767	555	-.7	-10.8	.0	-7.6	-341.
25.000	-.0	-4.6	480	442	-.0	-10.5	.1	-3.0	-112.
28.320	.1	-3.0	176	173	.3	-17.3	0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 280 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-12.9	-32.4	-1573.
	-2.1	-3.5	295	409	-7.1	-8.5			
5.000							-10.8	-28.9	-1362.
	-5.1	-8.4	693	623	-7.3	-13.4			
10.000							-5.7	-20.6	-981.
	-3.0	-6.0	816	539	-3.7	-11.0			
15.000							-2.7	-14.6	-731.
	-2.4	-6.2	767	555	-3.1	-11.1			
20.000							-.3	-8.5	-398.
	-.6	-5.0	480	442	-1.2	-11.2			
25.000							.3	-3.5	-141.
	.3	-3.5	176	173	1.5	-20.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 290 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-20.4	-28.9	-1474.
	-3.4	-1.6	295	409	-11.7	-3.8			
5.000							-16.9	-27.4	-1323.
	-7.0	-7.0	693	623	-10.1	-11.2			
10.000							-9.9	-20.4	-961.
	-4.9	-5.7	816	539	-5.9	-10.6			
15.000							-5.1	-14.7	-709.
	-3.9	-6.1	767	555	-5.1	-11.0			
20.000							-1.2	-8.5	-401.
	-1.3	-5.1	480	442	-2.7	-11.5			
25.000							.2	-3.5	-146.
	.2	-3.5	176	173	.9	-20.1			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 300 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-29.1	-23.5	-1259.
	-4.5	-.0	295	409	-15.3	-.0			
5.000							-24.6	-23.5	-1163.
	-8.8	-5.5	693	623	-12.7	-8.8			
10.000							-15.7	-18.0	-857.
	-7.1	-5.1	816	539	-8.7	-9.4			
15.000							-8.6	-12.9	-642.
	-5.9	-5.6	767	555	-7.6	-10.1			
20.000							-2.7	-7.3	-371.
	-2.4	-4.6	480	442	-5.0	-10.4			
25.000							-.3	-2.7	-120.
	-.3	-2.7	176	173	-2.0	-15.7			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 310 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-38.2	-19.0	-997.
	-4.9	.7	295	409	-16.7	1.8			
5.000							-33.2	-19.8	-946.
	-10.6	-4.4	693	623	-15.4	-7.0			
10.000							-22.6	-15.4	-705.
	-9.6	-4.5	816	539	-11.8	-8.3			
15.000							-13.0	-10.9	-533.
	-7.9	-4.9	767	555	-10.3	-8.8			
20.000							-5.1	-6.0	-321.
	-3.7	-4.1	480	442	-7.7	-9.4			
25.000							-1.4	-1.9	-91.
	-1.4	-1.9	176	173	-8.0	-11.0			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 320 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-45.9	-14.9	-700.
	-4.8	.7	295	409	-16.3	1.8			
5.000							-41.1	-15.7	-678.
	-12.0	-3.2	693	623	-17.4	-5.1			
10.000							-29.1	-12.5	-516.
	-12.2	-3.6	816	539	-14.9	-6.6			
15.000							-16.9	-9.0	-415.
	-9.5	-4.0	767	555	-12.4	-7.2			
20.000							-7.4	-4.9	-274.
	-4.7	-4.0	480	442	-9.8	-9.0			
25.000							-2.7	-1.0	-58.
	-2.7	-1.0	176	173	-15.3	-5.5			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 330 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-52.8	-10.1	-427.
	-4.7	.8	295	409	-16.0	1.9			
5.000							-48.1	-10.9	-428.
	-13.3	-2.4	693	623	-19.2	-3.9			
10.000							-34.8	-8.4	-310.
	-14.4	-2.7	816	539	-17.7	-5.0			
15.000							-20.4	-5.7	-252.
	-11.5	-2.8	767	555	-15.0	-5.1			
20.000							-8.9	-2.9	-172.
	-5.5	-2.9	480	442	-11.5	-6.5			
25.000							-3.4	-.0	-17.
	-3.4	-.0	176	173	-19.1	-.2			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 340 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-58.9	-4.9	-228.
	-5.2	1.3	295	409	-17.6	3.2			
5.000							-53.7	-6.2	-260.
	-14.7	-1.4	693	623	-21.2	-2.2			
10.000							-39.0	-4.8	-181.
	-16.6	-1.7	816	539	-20.3	-3.2			
15.000							-22.4	-3.1	-139.
	-12.5	-1.9	767	555	-16.3	-3.4			
20.000							-9.9	-1.2	-93.
	-6.0	-1.8	480	442	-12.4	-4.1			
25.000							-3.9	.6	14.
	-3.9	.6	176	173	-22.4	3.4			
28.320							0.0	0.0	0.

TABLE 7. SHEAR AND MOMENT DIAGRAMS : HELIOS TENSION STRUCTURE -- WITH WALL
WIND DIRECTION 350 CONFIGURATION B REFERENCE PRESSURE 17.0 PSF GUST FACTOR 2.25

Z-COORDINATE FEET	X-FORCE KIPS	Y-FORCE KIPS	X-AREA SQ FT	Y-AREA SQ FT	X-PRESS PSF	Y-PRESS PSF	X-SHEAR KIPS	Y-SHEAR KIPS	Z-MOMENT FT-KIPS
0.000							-62.6	-1.4	-56.
	-6.0	1.6	295	409	-20.4	3.8			
5.000							-56.6	-2.9	-96.
	-15.4	-.7	693	623	-22.3	-1.1			
10.000							-41.1	-2.3	-49.
	-17.8	-1.1	816	539	-21.8	-2.0			
15.000							-23.4	-1.2	-24.
	-13.0	-.9	767	555	-17.0	-1.6			
20.000							-10.3	-.3	-29.
	-6.0	-.9	480	442	-12.5	-1.9			
25.000							-4.3	.6	17.
	-4.3	.6	176	173	-24.6	3.3			
28.320							0.0	0.0	0.

TABLE 8. COMPARISON BETWEEN PRESSURE COEFFICIENTS (1) PEAK DIFFERENCE
(2) SIMULTANEOUS DIFFERENCE

CONFIGURATION A

COLUMN TAP	(1) MAX	(2) MIN	PEAK DIFFERENCE (3) POS	PEAK DIFFERENCE (4) NEG	SIMULTANEOUS DIFFERENCE (5) POS	SIMULTANEOUS DIFFERENCE (6) NEG	(7) RATIO
101	.604	-.549	1.637	-.688	1.641	-.599	.998
201	.139	-1.033	---		---		
103	.321	-.692	1.094	-.800	.911	-.588	1.201
203	.027	-.773	---		---		
104	.491	-1.180	1.413	-1.447	1.180	-1.300	1.113
204	.267	-.922		---		---	
105	.569	-1.013	1.273	-1.375	1.151	-1.263	1.089
205	.362	-.704		---		---	
106	.569	-.887	1.094	-1.138	.946	-1.007	1.130
206	.251	-.525		---		---	
109	.438	-.660	1.177	-.778	1.036	-.655	1.136
209	.118	-.739	---		---		
112	.393	-.984	1.100	-1.238	.845	-.952	1.300
212	.254	-.707		---		---	
113	.233	-1.288	.723	-1.675	.629	-1.169	1.433
213	.387	-.490		---		---	
126	.371	-1.545	.646	-1.981	.566	-1.541	1.286
226	.436	-.275		---		---	
130	.412	-1.100	.701	-1.620	.450	-1.392	1.164
230	.520	-.289		---		---	
132	.114	-.972	.629	-1.256	.178	-1.122	1.119
232	.284	-.515		---		---	
133	.373	-1.060	.645	-1.571	.361	-1.320	1.190
233	.511	-.272		---		---	
134	.322	-.983	.753	-1.244	.617	-1.002	1.242
234	.261	-.431		---		---	
135	.539	-.600	1.461	-.735	1.252	-.510	1.167
235	.135	-.922	---		---		
136	.327	-1.332	.615	-1.715	.383	-1.340	1.280
236	.383	-.288		---		---	
139	.369	-.869	1.158	-1.068	.986	-.642	1.174
239	.208	-.789	---		---		

146	.371	-1.004	.742	-1.324	.571	-1.146	1.155
246	.320	-.371		---		---	
151	.579	-.688	1.212	-.905	1.114	-.537	1.088
251	.217	-.633	---		---		
152	.571	-.741	1.143	-.941	.944	-.650	1.211
252	.200	-.572	---		---		
153	.434	-.906	1.211	-1.171	1.196	-.884	1.013
253	.265	-.777	---		---		
155	.426	-.685	1.157	-.836	1.111	-.817	1.041
255	.151	-.731	---		---		
157	.189	-.449	1.092	-.479	.983	-.348	1.111
257	.030	-.903	---		---		

CONFIGURATION B

			PEAK DIFFERENCE		SIMULTANEOUS DIFFERENCE		
COLUMN TAP	(1) MAX	(2) MIN	(3) POS	(4) NEG	(5) POS	(6) NEG	(7) RATIO
101	.456	-.638	1.175	-.952	1.076	-.711	1.092
201	.314	-.719	---		---		
103	.297	-1.077	.999	-1.409	.931	-1.435	.982
203	.332	-.702		---		---	
104	.383	-1.254	1.198	-1.737	1.011	-1.212	1.433
204	.483	-.815		---		---	
105	.403	-.823	.952	-1.340	.799	-1.472	.910
205	.517	-.549		---		---	
106	.446	-.797	.977	-1.193	.794	-.931	1.281
206	.396	-.531		---		---	
109	.426	-.481	1.187	-.774	1.288	-.939	.922
209	.293	-.761	---		---		
112	.340	-.859	.963	-1.261	1.000	-1.123	1.123
212	.402	-.623		---		---	
113	.224	-1.254	.535	-1.754	.413	-1.429	1.227
213	.500	-.311		---		---	
126	.360	-1.604	.654	-2.054	.569	-1.826	1.125
226	.450	-.294		---		---	
130	.444	-1.201	.730	-1.708	.511	-1.567	1.090
230	.507	-.286		---		---	
132	.133	-1.149	.442	-1.590	.143	-1.513	1.051
232	.441	-.309		---		---	
133	.352	-1.069	.639	-1.667	.304	-1.523	1.095

233	.598	-.287		---		---	
134	.308	-.884	.723	-1.247	.681	-1.118	1.115
234	.363	-.415		---		---	
135	.548	-.648	1.385	-.814	1.195	-.692	1.159
235	.166	-.837	---		---		
136	.383	-.991	.680	-1.332	.257	-.991	1.344
236	.341	-.297		---		---	
139	.376	-.902	.973	-1.181	.848	-.715	-1.393
239	.279	-.597		---	---		
146	.294	-.921	.630	-1.242	.322	-.789	1.574
246	.321	-.336		---		---	
151	.566	-.813	1.071	-1.112	.939	-.655	-1.184
251	.299	-.505		---	---		
152	.472	-.692	.999	-.983	.966	-.783	1.034
252	.291	-.527	---		---		
153	.457	-.772	1.031	-1.113	.716	-.761	1.463
253	.341	-.574		---		---	
155	.345	-.709	1.048	-.872	1.082	-.634	.969
255	.163	-.703	---		---		
157	.216	-.479	.989	-.587	.903	-.469	1.095
257	.108	-.773	---		---		

NOTES REFER TO COLUMN NUMBER:

(1) MAXIMUM PEAK PRESSURE COEFFICIENT(CP)
(2) MINIMUM PEAK CP
(3) PEAK DOWNWARD ACTING CP CALCULATED BY TAKING THE MAXIMUM PEAK CP FOR THE TOP TAP (100'S) AND SUBTRACTING THE MINIMUM PEAK CP FOR THE BOTTOM TAP (200'S)
(4) PEAK UPWARD ACTING CP CALCULATED BY TAKING THE MINIMUM PEAK CP FOR THE TOP TAP AND SUBTRACTING THE MAXIMUM PEAK CP FOR THE BOTTOM TAP
(5) PEAK DOWNWARD ACTING CP CALCULATED BY TAKING THE DIFFERENCE IN CP ACROSS THE TAPS SIMULTANEOUSLY
(6) PEAK UPWARD ACTING CP CALCULATED BY TAKING THE DIFFERENCE IN CP ACROSS THE TAPS SIMULTANEOUSLY
(7) RATIO OF THE CONTROLLING PEAK OF EITHER (3) OR (4) TO THE CONTROLLING PEAK OF EITHER (5) OR (6). IN EACH CASE THE VALUE UNDERLINED IS THE CONTROLLING PEAK

APPENDIX A

PRESSURE DATA

Note: Pressure coefficients are defined in Section 4.3.

Pressure tap designation is explained in Figure 3.

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
0	101	-.165	.064	.031	-.492
0	102	-.170	.061	.009	-.497
0	103	-.322	.095	-.052	-.648
0	104	-.273	.102	.056	-.903
0	105	-.238	.093	.053	-.917
0	106	-.241	.081	-.005	-.826
0	107	-.163	.044	-.006	-.420
0	108	-.274	.074	-.051	-.607
0	109	-.204	.037	-.067	-.328
0	110	-.263	.091	.092	-.891
0	111	-.251	.082	.004	-.672
0	112	-.277	.060	-.058	-.504
0	113	-.327	.095	-.017	-.841
0	114	-.347	.112	-.070	-1.046
0	115	-.285	.086	-.001	-.645
0	116	-.355	.082	-.159	-.806
0	117	-.163	.023	-.093	-.235
0	118	-.351	.087	-.102	-.678
0	119	-.390	.108	-.067	-.876
0	120	-.401	.095	-.139	-.824
0	121	-.333	.081	-.148	-.813
0	122	-.379	.115	-.111	-1.149
0	123	-.233	.050	-.062	-.476
0	124	-.362	.105	-.107	-.985
0	125	-.340	.093	-.146	-.899
0	126	-.359	.085	-.190	-.847
0	127	-.234	.045	-.114	-.395
0	128	-.298	.060	-.147	-.499
0	129	-.399	.105	-.143	-.824
0	130	-.432	.109	-.150	-1.100
0	131	-.443	.107	-.169	-.930
0	132	-.480	.106	-.243	-.826
0	133	-.371	.091	-.172	-.826
0	134	-.365	.078	-.167	-.738
0	135	-.135	.048	-.029	-.348
0	136	.100	.061	.307	-.078
0	137	-.232	.059	-.065	-.452
0	138	-.253	.074	-.062	-.602
0	139	-.202	.035	-.110	-.388
0	140	-.200	.062	-.043	-.477
0	141	.116	.059	.306	-.024
0	142	-.222	.047	-.088	-.406
0	143	-.232	.043	-.110	-.373
0	144	-.275	.063	-.121	-.501
0	145	-.116	.021	-.052	-.192
0	146	-.102	.060	.295	-.063
0	147	-.115	.032	.011	-.245
0	148	.010	.051	.219	-.197
0	149	-.021	.045	.143	-.201
0	150	-.119	.038	-.007	-.248
0	151	.206	.099	.545	-.200
0	152	.230	.100	.571	-.015
0	153	.128	.077	.397	-.047
0	154	-.012	.043	.130	-.157
0	155	-.064	.022	.021	-.157
0	156	.074	.064	.302	-.210
0	157	-.020	.026	.076	-.139
0	201	-.102	.046	.060	-.302
0	203	-.080	.021	-.013	-.166
0	204	.026	.038	.186	-.103
0	205	.060	.058	.334	-.185
0	206	-.030	.049	.196	-.212
0	209	-.037	.021	.035	-.123
0	212	.056	.040	.254	-.071
0	213	.059	.069	.387	-.152
0	226	.000	.047	.196	-.161
0	230	-.008	.044	.179	-.180
0	232	-.039	.077	.269	-.325
0	233	-.009	.038	.109	-.140
0	234	.015	.048	.234	-.202
0	235	-.031	.020	.028	-.149
0	236	-.019	.038	.108	-.192
0	239	-.019	.040	.143	-.190
0	246	-.063	.051	.103	-.252
0	251	-.063	.065	.107	-.525
0	252	-.079	.060	.093	-.569
0	253	-.089	.081	.114	-.709
0	255	-.026	.028	.058	-.187
0	257	-.153	.131	.025	-.903
10	101	-.141	.060	.074	-.407
10	102	-.161	.062	.044	-.454
10	103	-.156	.062	-.017	-.470
10	104	-.245	.081	-.009	-.595
10	105	-.252	.114	.088	-.864
10	106	-.225	.085	.026	-.618
10	107	-.128	.062	.045	-.624
10	108	-.268	.077	-.017	-.789
10	109	-.148	.039	.010	-.283
10	110	-.246	.095	.081	-.750
10	111	-.272	.112	.040	-1.084
10	112	-.229	.067	-.019	-.502
10	113	-.344	.088	-.032	-.648
10	114	-.321	.095	-.060	-.983
10	115	-.272	.103	.040	-.815
10	116	-.348	.089	-.123	-.799
10	117	-.151	.022	-.063	-.244
10	118	-.330	.098	-.054	-.784
10	119	-.388	.103	-.069	-.839
10	120	-.405	.098	-.134	-.788
10	121	-.373	.089	-.200	-.880
10	122	-.370	.116	-.101	-1.074
10	123	-.205	.052	-.019	-.408
10	124	-.388	.108	-.098	-.835
10	125	-.364	.097	-.176	-.983
10	126	-.328	.078	-.173	-.695
10	127	-.236	.048	-.098	-.388
10	128	-.286	.062	-.122	-.518
10	129	-.366	.099	-.150	-.829
10	130	-.386	.096	-.154	-.767
10	131	-.467	.101	-.219	-.840
10	132	-.511	.106	-.225	-.927
10	133	-.376	.086	-.149	-.828
10	134	-.355	.080	-.126	-.689
10	135	-.162	.049	-.044	-.390
10	136	.045	.059	.244	-.116
10	137	-.161	.054	-.012	-.404
10	138	-.326	.078	-.136	-.607
10	139	-.213	.037	-.086	-.353
10	140	-.286	.068	-.119	-.553
10	141	.096	.053	.276	-.070
10	142	-.187	.045	-.061	-.376
10	143	-.222	.041	-.095	-.389
10	144	-.312	.062	-.168	-.521
10	145	-.166	.024	-.104	-.250
10	146	-.057	.054	.254	-.114
10	147	-.159	.034	-.045	-.280
10	148	-.062	.047	.111	-.242
10	149	-.018	.042	.132	-.157
10	150	-.224	.046	-.097	-.428
10	151	.200	.099	.552	-.162
10	152	.218	.094	.545	-.060
10	153	.069	.067	.319	-.102
10	154	-.070	.042	.091	-.278
10	155	-.107	.025	-.030	-.210
10	156	.023	.057	.240	-.270
10	157	-.022	.029	.078	-.145
10	201	-.075	.037	.085	-.222
10	203	-.092	.021	-.008	-.173
10	204	.026	.038	.208	-.124
10	205	.066	.066	.332	-.224
10	206	-.024	.048	.229	-.217
10	209	-.057	.021	.004	-.156
10	212	.057	.043	.254	-.070
10	213	.060	.065	.327	-.166
10	226	.012	.052	.232	-.158
10	230	.006	.050	.192	-.172
10	232	-.018	.075	.254	-.320
10	233	-.003	.039	.128	-.159
10	234	-.023	.048	.224	-.194
10	235	-.024	.019	.064	-.130

APPENDIX A -- PRESSURE DATA: HELIOS TENSION STRUCTURE -- NO WALL

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
10	236	-.009	.036	.118	-.118
10	239	-.021	.039	.175	-.217
10	246	-.042	.052	.121	-.307
10	251	-.063	.075	.114	-.587
10	252	-.063	.061	.113	-.473
10	253	-.063	.077	.162	-.573
10	255	-.015	.028	.080	-.176
10	257	-.137	.106	.018	-.653
20	101	-.125	.062	.068	-.486
20	102	-.153	.073	.097	-.463
20	103	-.085	.035	.098	-.282
20	104	-.249	.084	-.019	-.796
20	105	-.230	.104	.084	-1.013
20	106	-.175	.075	.038	-.470
20	107	-.109	.080	.133	-.684
20	108	-.278	.108	.054	-.814
20	109	-.123	.053	.057	-.443
20	110	-.208	.101	.108	-.732
20	111	-.265	.118	.043	-.912
20	112	-.230	.087	.030	-.818
20	113	-.346	.083	-.107	-.716
20	114	-.311	.076	-.067	-.654
20	115	-.280	.122	.050	-1.035
20	116	-.353	.099	-.135	-.932
20	117	-.154	.024	-.019	-.280
20	118	-.334	.114	-.005	-1.121
20	119	-.416	.097	-.149	-.908
20	120	-.417	.097	-.076	-.773
20	121	-.381	.102	-.181	-1.038
20	122	-.382	.111	-.138	-.976
20	123	-.182	.058	.048	-.385
20	124	-.438	.111	-.173	-.811
20	125	-.403	.103	-.201	-1.016
20	126	-.338	.091	-.158	-.932
20	127	-.234	.050	-.070	-.465
20	128	-.272	.063	-.101	-.558
20	129	-.359	.087	-.155	-.757
20	130	-.362	.097	-.165	-.903
20	131	-.502	.097	-.231	-.859
20	132	-.509	.094	-.297	-.896
20	133	-.386	.076	-.197	-.679
20	134	-.346	.072	-.151	-.659
20	135	-.168	.035	-.077	-.386
20	136	-.023	.059	.159	-.219
20	137	-.102	.052	.096	-.318
20	138	-.382	.077	-.192	-.733
20	139	-.245	.048	-.128	-.455
20	140	-.362	.075	-.175	-.668
20	141	-.034	.052	.195	-.184
20	142	-.145	.041	.006	-.315
20	143	-.223	.043	-.093	-.420
20	144	-.351	.069	-.186	-.589
20	145	-.183	.024	-.111	-.273
20	146	-.002	.050	.177	-.171
20	147	-.201	.040	-.107	-.382
20	148	-.149	.047	-.012	-.382
20	149	-.023	.043	.180	-.155
20	150	-.278	.049	-.155	-.449
20	151	.182	.089	.493	-.112
20	152	.178	.092	.474	-.128
20	153	-.017	.056	.183	-.194
20	154	-.135	.040	-.003	-.302
20	155	-.145	.025	-.063	-.244
20	156	-.049	.069	.152	-.457
20	157	-.035	.031	.062	-.199
20	201	-.065	.035	-.062	-.230
20	203	-.081	.021	-.015	-.160
20	204	.019	.038	.217	-.181
20	205	.062	.062	.362	-.133
20	206	-.010	.040	.153	-.135
20	209	-.052	.023	.044	-.149
20	212	.049	.043	.232	-.144
20	213	.038	.036	.297	-.127
20	226	.019	.032	.251	-.142
20	230	.027	.049	.242	-.107
20	232	-.019	.066	.225	-.305
20	233	.011	.034	.133	-.111
20	234	.034	.048	.205	-.153
20	235	-.034	.020	.054	-.168
20	236	.012	.034	.145	-.113
20	239	-.033	.043	.192	-.300
20	246	-.008	.030	.143	-.193
20	251	-.043	.071	.133	-.501
20	252	-.045	.065	.132	-.541
20	253	-.023	.077	.180	-.475
20	255	-.004	.027	.097	-.195
20	257	-.104	.086	.016	-.659
30	101	-.105	.052	.056	-.412
30	102	-.114	.056	.037	-.444
30	103	-.051	.040	.119	-.325
30	104	-.236	.105	.063	-.757
30	105	-.173	.078	.025	-.650
30	106	-.142	.058	.008	-.394
30	107	-.065	.071	.136	-.526
30	108	-.263	.123	.018	-.938
30	109	-.087	.072	.240	-.660
30	110	-.168	.090	.072	-.697
30	111	-.215	.090	.077	-.723
30	112	-.209	.103	.098	-.804
30	113	-.320	.086	-.090	-.669
30	114	-.337	.090	-.019	-.850
30	115	-.256	.104	.078	-.761
30	116	-.393	.130	-.036	-1.167
30	117	-.135	.029	-.005	-.274
30	118	-.352	.136	.025	-1.095
30	119	-.434	.097	-.165	-.817
30	120	-.389	.108	-.079	-.740
30	121	-.404	.106	-.187	-1.049
30	122	-.402	.102	-.173	-1.070
30	123	-.154	.070	-.132	-.468
30	124	-.440	.093	-.158	-.799
30	125	-.418	.103	-.202	-.908
30	126	-.351	.094	-.164	-1.068
30	127	-.231	.055	-.056	-.432
30	128	-.275	.066	-.040	-.522
30	129	-.406	.087	-.169	-.765
30	130	-.345	.092	-.107	-.841
30	131	-.487	.093	-.245	-.820
30	132	-.470	.085	-.235	-.837
30	133	-.374	.065	-.205	-.719
30	134	-.372	.076	-.116	-.771
30	135	-.151	.026	-.062	-.383
30	136	-.119	.064	.084	-.392
30	137	-.035	.050	.136	-.223
30	138	-.418	.090	-.176	-.747
30	139	-.259	.048	-.136	-.438
30	140	-.446	.087	-.239	-.792
30	141	-.046	.046	.109	-.210
30	142	-.092	.045	.059	-.253
30	143	-.199	.042	-.084	-.387
30	144	-.377	.082	-.154	-.684
30	145	-.188	.027	-.102	-.275
30	146	-.082	.049	.086	-.258
30	147	-.238	.047	-.126	-.420
30	148	-.240	.057	-.065	-.463
30	149	-.026	.039	.156	-.172
30	150	-.347	.064	-.204	-.588
30	151	.156	.090	.435	-.270
30	152	.116	.083	.392	-.159
30	153	-.100	.048	.056	-.268
30	154	-.213	.048	-.084	-.459
30	155	-.188	.030	-.098	-.280
30	156	-.151	.101	.032	-.738
30	157	-.058	.031	.057	-.233
30	201	-.055	.030	.098	-.166
30	203	-.059	.020	.004	-.157
30	204	.029	.038	.215	-.103
30	205	.079	.054	.313	-.072
30	206	-.012	.033	.146	-.168
30	209	-.041	.022	.034	-.142

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
30	212	.034	.042	.223	-.086
30	213	.071	.048	.248	-.111
30	226	.040	.046	.213	-.123
30	230	.064	.047	.235	-.107
30	232	-.027	.060	.158	-.412
30	233	.024	.029	.150	-.075
30	234	.039	.042	.256	-.093
30	235	-.048	.021	.023	-.161
30	236	.049	.038	.193	-.101
30	239	.032	.039	.183	-.251
30	246	.032	.046	.171	-.191
30	251	-.031	.060	.155	-.396
30	252	-.023	.067	.166	-.568
30	253	.021	.072	.234	-.578
30	255	.009	.022	.088	-.176
30	257	-.071	.057	.018	-.451
40	101	-.092	.041	.023	-.318
40	102	-.091	.039	.051	-.320
40	103	-.041	.042	.142	-.254
40	104	-.196	.089	.060	-.734
40	105	-.142	.061	.018	-.451
40	106	-.126	.046	.026	-.420
40	107	-.039	.055	.144	-.350
40	108	-.205	.094	.013	-.791
40	109	-.063	.071	.164	-.507
40	110	-.138	.065	.123	-.439
40	111	-.170	.077	.072	-.632
40	112	-.166	.101	.083	-.984
40	113	-.263	.077	-.093	-.613
40	114	-.342	.124	-.026	-1.030
40	115	-.215	.092	.045	-.599
40	116	-.403	.138	-.043	-1.218
40	117	-.102	.032	.008	-.249
40	118	-.309	.122	-.001	-.893
40	119	-.364	.090	-.116	-.734
40	120	-.310	.109	-.025	-.732
40	121	-.439	.130	-.168	-1.332
40	122	-.402	.101	-.138	-.981
40	123	-.121	.082	.251	-.654
40	124	-.457	.111	-.217	-1.055
40	125	-.424	.097	-.228	-.994
40	126	-.383	.103	-.187	-1.106
40	127	-.202	.053	-.005	-.426
40	128	-.251	.065	-.028	-.506
40	129	-.416	.095	-.105	-.828
40	130	-.361	.096	-.109	-.879
40	131	-.392	.086	-.185	-.745
40	132	-.387	.078	-.149	-.670
40	133	-.332	.066	-.057	-.595
40	134	-.369	.085	-.045	-.672
40	135	-.127	.025	-.027	-.242
40	136	-.219	.070	.005	-.457
40	137	-.033	.055	.213	-.185
40	138	-.454	.107	-.173	-.880
40	139	-.254	.050	-.119	-.437
40	140	-.489	.098	-.222	-.846
40	141	-.132	.050	.009	-.340
40	142	-.032	.048	.144	-.205
40	143	-.147	.040	.008	-.294
40	144	-.405	.080	-.159	-.685
40	145	-.178	.028	-.094	-.308
40	146	-.170	.051	-.022	-.341
40	147	-.253	.051	-.102	-.440
40	148	-.303	.066	-.130	-.596
40	149	-.010	.041	.161	-.163
40	150	-.371	.063	-.209	-.581
40	151	.117	.081	.374	-.229
40	152	.080	.071	.329	-.313
40	153	-.184	.046	-.037	-.401
40	154	-.253	.050	-.127	-.430
40	155	-.196	.032	-.103	-.323
40	156	-.279	.119	.020	-.720
40	157	-.092	.044	.018	-.363
40	201	-.052	.022	.065	-.163
40	203	-.047	.019	.016	-.135
40	204	.046	.041	.250	-.076
40	205	.100	.051	.360	-.076
40	206	-.030	.025	.078	-.126
40	209	-.031	.021	.053	-.116
40	212	.014	.031	.189	-.084
40	213	.104	.042	.275	-.078
40	226	.091	.051	.324	-.091
40	230	.137	.063	.454	-.025
40	232	-.004	.049	.180	-.211
40	233	.035	.024	.141	-.039
40	234	.046	.042	.261	-.116
40	235	-.048	.023	.030	-.174
40	236	.081	.039	.231	-.073
40	239	.026	.033	.129	-.112
40	246	.065	.040	.201	-.173
40	251	-.035	.048	.136	-.426
40	252	.000	.053	.148	-.291
40	253	.059	.054	.242	-.345
40	255	.005	.020	.078	-.078
40	257	-.057	.042	.020	-.433
50	101	-.114	.046	.016	-.317
50	102	-.075	.027	.025	-.206
50	103	-.040	.033	.090	-.199
50	104	-.154	.056	.018	-.438
50	105	-.120	.043	.030	-.305
50	106	-.107	.040	.021	-.294
50	107	-.030	.045	.119	-.316
50	108	-.152	.057	.001	-.391
50	109	-.044	.057	.162	-.466
50	110	-.115	.053	.054	-.421
50	111	-.145	.073	.057	-.539
50	112	-.128	.077	.086	-.706
50	113	-.200	.055	-.056	-.496
50	114	-.311	.126	-.026	-1.019
50	115	-.182	.084	.038	-.609
50	116	-.355	.105	-.083	-1.062
50	117	-.077	.032	.025	-.288
50	118	-.286	.100	-.028	-.808
50	119	-.311	.086	-.087	-.617
50	120	-.226	.097	.007	-.684
50	121	-.430	.105	-.142	-.930
50	122	-.432	.107	-.155	-.937
50	123	-.099	.093	.164	-.607
50	124	-.450	.100	-.188	-.834
50	125	-.445	.107	-.192	-1.131
50	126	-.398	.106	-.152	-1.084
50	127	-.150	.057	.066	-.416
50	128	-.200	.069	.049	-.610
50	129	-.393	.102	-.060	-.800
50	130	-.377	.105	-.158	-.970
50	131	-.251	.073	.007	-.642
50	132	-.279	.072	-.018	-.592
50	133	-.233	.068	.029	-.537
50	134	-.347	.098	-.010	-.799
50	135	-.097	.026	-.007	-.209
50	136	-.321	.079	-.118	-.622
50	137	.085	.056	.305	-.113
50	138	-.425	.100	-.145	-.813
50	139	-.225	.049	-.063	-.403
50	140	-.447	.099	-.212	-.813
50	141	-.244	.064	-.056	-.487
50	142	.040	.049	.199	-.141
50	143	-.082	.036	.036	-.223
50	144	-.383	.080	-.146	-.735
50	145	-.148	.027	-.041	-.288
50	146	-.257	.060	-.128	-.464
50	147	-.249	.049	-.122	-.411
50	148	-.346	.064	-.195	-.558
50	149	.007	.039	.159	-.101
50	150	-.373	.066	-.223	-.628
50	151	.076	.075	.287	-.255
50	152	.919	.058	.218	-.294
50	153	-.253	.045	-.112	-.437
50	154	-.279	.057	-.139	-.502
50	155	-.216	.039	-.087	-.382

APPENDIX A -- PRESSURE DATA: HELIOS TENSION STRUCTURE -- NO WALL

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
50	156	-.372	.109	-.046	-.764
50	157	-.126	.049	-.019	-.329
50	201	-.064	.021	.007	-.145
50	203	-.045	.018	.026	-.110
50	204	.046	.035	.189	-.049
50	205	.064	.043	.235	-.053
50	206	-.032	.024	.051	-.147
50	209	-.026	.019	.039	-.129
50	212	.007	.027	.130	-.069
50	213	.091	.036	.232	-.035
50	226	.117	.059	.347	-.054
50	230	.178	.075	.443	.001
50	232	.018	.034	.134	-.147
50	233	.048	.026	.167	-.037
50	234	.036	.039	.240	-.089
50	235	-.035	.021	.048	-.127
50	236	.092	.041	.263	-.033
50	239	.024	.030	.129	-.145
50	246	.077	.038	.210	-.091
50	251	-.037	.041	.077	-.285
50	252	-.013	.052	.147	-.355
50	253	.066	.045	.264	-.275
50	255	.005	.022	.089	-.086
50	257	-.051	.027	.027	-.391
60	101	-.157	.052	-.025	-.389
60	102	-.073	.020	-.000	-.176
60	103	-.041	.027	.099	-.151
60	104	-.138	.037	-.005	-.342
60	105	-.105	.034	.040	-.262
60	106	-.082	.032	.026	-.293
60	107	-.030	.036	.112	-.196
60	108	-.129	.041	-.010	-.369
60	109	-.042	.042	.138	-.291
60	110	-.087	.052	.067	-.363
60	111	-.125	.056	.081	-.420
60	112	-.117	.059	.081	-.395
60	113	-.154	.050	.026	-.380
60	114	-.254	.089	-.003	-.685
60	115	-.164	.083	.059	-.592
60	116	-.308	.075	-.065	-.690
60	117	-.071	.043	.068	-.509
60	118	-.281	.095	-.053	-.664
60	119	-.224	.087	-.007	-.542
60	120	-.177	.087	.029	-.569
60	121	-.415	.094	-.172	-.815
60	122	-.416	.122	-.127	-.964
60	123	-.078	.077	.194	-.505
60	124	-.371	.108	-.067	-.793
60	125	-.465	.118	-.170	-1.082
60	126	-.410	.108	-.163	-.947
60	127	-.107	.064	.075	-.927
60	128	-.153	.075	.085	-.499
60	129	-.356	.112	-.051	-.980
60	130	-.416	.126	-.141	-1.014
60	131	-.116	.063	.124	-.344
60	132	-.180	.062	.038	-.389
60	133	-.105	.064	.124	-.338
60	134	-.317	.114	-.012	-.983
60	135	-.075	.033	.046	-.449
60	136	-.411	.091	-.189	-.733
60	137	.107	.051	.268	-.049
60	138	-.402	.096	-.138	-.831
60	139	-.183	.054	-.007	-.357
60	140	-.421	.100	-.149	-.782
60	141	-.323	.070	-.162	-.611
60	142	.077	.046	.221	-.076
60	143	-.020	.034	.114	-.145
60	144	-.338	.081	-.101	-.684
60	145	-.110	.029	-.012	-.258
60	146	-.319	.063	-.179	-.564
60	147	-.221	.053	-.074	-.403
60	148	-.351	.075	-.178	-.589
60	149	.023	.036	.141	-.092
60	150	-.334	.058	-.196	-.567
60	151	.036	.055	.278	-.201
60	152	-.032	.045	.185	-.285
60	153	-.292	.042	-.168	-.449
60	154	-.273	.052	-.129	-.552
60	155	-.201	.038	-.083	-.392
60	156	-.444	.109	-.112	-.945
60	157	-.167	.052	-.031	-.389
60	201	-.068	.023	.030	-.170
60	203	-.046	.017	.018	-.111
60	204	.019	.030	.171	-.077
60	205	.030	.026	.198	-.051
60	206	-.021	.024	.125	-.115
60	209	-.027	.017	.037	-.086
60	212	.004	.024	.114	-.074
60	213	.066	.036	.210	-.068
60	226	.122	.062	.436	-.047
60	230	.174	.074	.520	.013
60	232	.016	.028	.147	-.107
60	233	.052	.027	.174	-.027
60	234	.034	.027	.205	-.068
60	235	-.024	.022	.066	-.113
60	236	.101	.050	.284	-.010
60	239	.020	.030	.163	-.127
60	246	.078	.036	.205	-.058
60	251	-.051	.039	.085	-.276
60	252	-.015	.045	.127	-.252
60	253	.061	.035	.186	-.140
60	255	-.006	.020	.052	-.088
60	257	-.058	.023	.011	-.240
70	101	-.222	.060	-.070	-.536
70	102	-.077	.021	-.019	-.188
70	103	-.054	.025	.041	-.173
70	104	-.135	.027	.003	-.262
70	105	-.106	.028	.008	-.293
70	106	-.069	.022	.005	-.225
70	107	-.035	.029	.080	-.146
70	108	-.117	.032	-.028	-.292
70	109	-.053	.036	.080	-.302
70	110	-.071	.047	.112	-.335
70	111	-.110	.039	.040	-.347
70	112	-.108	.048	.038	-.373
70	113	-.103	.044	.061	-.319
70	114	-.216	.063	-.003	-.482
70	115	-.136	.062	.045	-.613
70	116	-.269	.056	-.074	-.478
70	117	-.067	.035	.048	-.337
70	118	-.251	.099	-.017	-.702
70	119	-.119	.073	.110	-.386
70	120	-.146	.077	.063	-.510
70	121	-.352	.075	-.157	-.717
70	122	-.369	.110	-.090	-.967
70	123	-.066	.049	.130	-.294
70	124	-.234	.094	.106	-.654
70	125	-.423	.114	-.166	-1.136
70	126	-.408	.103	-.143	-.866
70	127	-.087	.067	.089	-.645
70	128	-.121	.075	.087	-.621
70	129	-.334	.110	-.074	-.961
70	130	-.428	.126	-.172	-1.057
70	131	-.005	.051	.231	-.195
70	132	-.156	.077	.109	-.569
70	133	-.001	.059	.227	-.190
70	134	-.253	.092	.046	-.736
70	135	-.071	.041	.056	-.472
70	136	-.428	.095	-.207	-.933
70	137	.105	.048	.328	-.026
70	138	-.367	.091	-.138	-.723
70	139	-.134	.050	.055	-.357
70	140	-.389	.091	-.103	-.785
70	141	-.394	.077	-.211	-.661
70	142	.088	.044	.248	-.033
70	143	.001	.029	.114	-.203
70	144	-.268	.074	-.063	-.577
70	145	-.080	.032	.045	-.396
70	146	-.361	.067	-.197	-.607
70	147	-.181	.054	-.028	-.382

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
70	148	-.349	.082	-.163	-.670
70	149	.020	.030	.133	-.083
70	150	-.259	.057	-.100	-.449
70	151	-.026	.047	.127	-.309
70	152	-.100	.044	.041	-.316
70	153	-.302	.053	-.180	-.550
70	154	-.230	.053	-.091	-.422
70	155	-.179	.036	-.050	-.354
70	156	-.444	.109	-.123	-.879
70	157	-.166	.048	-.036	-.359
70	201	-.064	.021	.020	-.158
70	203	-.051	.017	.001	-.132
70	204	-.001	.022	.213	-.072
70	205	.022	.022	.134	-.060
70	206	-.017	.022	.115	-.110
70	209	.032	.018	.037	-.094
70	212	-.004	.020	.077	-.072
70	213	.031	.025	.147	-.073
70	226	.099	.059	.359	-.037
70	230	.131	.062	.486	-.018
70	232	.008	.029	.157	-.108
70	233	.031	.025	.131	-.044
70	234	.031	.024	.150	-.053
70	235	-.016	.022	.135	-.104
70	236	.055	.039	.217	-.055
70	239	.019	.028	.151	-.115
70	246	.071	.038	.220	-.068
70	251	-.043	.034	.059	-.247
70	252	-.007	.033	.110	-.197
70	253	.051	.036	.265	-.183
70	255	-.010	.022	.077	-.083
70	257	-.064	.022	.011	-.146
80	101	-.236	.056	-.085	-.504
80	102	-.124	.023	.056	-.231
80	103	-.093	.035	.008	-.283
80	104	-.153	.027	-.048	-.302
80	105	-.115	.024	-.022	-.294
80	106	-.063	.017	.005	-.171
80	107	-.067	.031	.045	-.191
80	108	-.152	.033	-.049	-.300
80	109	-.068	.027	.053	-.170
80	110	-.054	.031	.047	-.228
80	111	-.121	.032	-.012	-.244
80	112	-.103	.031	.023	-.292
80	113	-.073	.039	.076	-.265
80	114	-.211	.052	-.060	-.431
80	115	-.116	.037	-.001	-.272
80	116	-.262	.059	-.112	-.523
80	117	-.051	.023	.026	-.169
80	118	-.185	.070	-.028	-.774

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
80	119	-.044	.058	.118	-.419
80	120	-.127	.074	.141	-.418
80	121	-.322	.069	-.152	-.714
80	122	-.319	.083	-.115	-.840
80	123	-.049	.035	.115	-.199
80	124	-.104	.092	.253	-.470
80	125	-.362	.090	-.135	-.749
80	126	-.395	.096	-.075	-.895
80	127	-.064	.050	.130	-.368
80	128	-.101	.056	.036	-.472
80	129	-.282	.093	-.025	-.769
80	130	-.397	.108	-.172	-.996
80	131	-.004	.054	.238	-.217
80	132	-.154	.084	.114	-.536
80	133	.019	.062	.352	-.210
80	134	-.190	.063	-.010	-.561
80	135	-.057	.029	.043	-.218
80	136	-.409	.089	-.171	-.781
80	137	.083	.051	.274	-.264
80	138	-.317	.087	-.074	-.697
80	139	-.093	.036	.033	-.294
80	140	-.335	.087	-.096	-.686
80	141	-.445	.091	-.224	-.839
80	142	.080	.046	.270	-.099
80	143	-.024	.045	.108	-.299
80	144	-.193	.062	-.022	-.546
80	145	-.060	.027	.023	-.331
80	146	-.372	.073	-.191	-.612
80	147	-.100	.037	.013	-.274
80	148	-.278	.066	-.117	-.513
80	149	-.003	.031	.132	-.186
80	150	-.187	.043	-.071	-.395
80	151	-.082	.043	.053	-.285
80	152	-.167	.046	-.010	-.486
80	153	-.299	.053	-.167	-.609
80	154	-.196	.047	-.058	-.411
80	155	-.150	.037	.000	-.322
80	156	-.324	.097	-.120	-.803
80	157	-.137	.044	-.017	-.415
80	201	-.075	.021	-.013	-.163
80	203	-.055	.017	-.001	-.128
80	204	-.003	.022	.099	-.080
80	205	.014	.024	.118	-.089
80	206	-.029	.021	.075	-.115
80	209	-.036	.021	.040	-.149
80	212	-.019	.019	.079	-.095
80	213	.006	.023	.102	-.104
80	226	.044	.054	.333	-.095
80	230	.073	.050	.414	-.037
80	232	-.010	.026	.107	-.128

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
80	233	.012	.022	.107	-.049
80	234	.013	.021	.087	-.058
80	235	-.015	.019	.083	-.092
80	236	.016	.027	.172	-.068
80	239	.017	.027	.137	-.084
80	246	.040	.034	.187	-.088
80	251	-.021	.033	.114	-.180
80	252	-.005	.032	.120	-.155
80	253	.052	.041	.236	-.097
80	255	-.011	.021	.087	-.083
80	257	-.069	.021	-.008	-.144
90	101	-.202	.054	-.030	-.452
90	102	-.123	.022	-.061	-.244
90	103	-.174	.048	-.042	-.383
90	104	-.178	.028	-.093	-.314
90	105	-.127	.022	-.049	-.210
90	106	-.058	.016	-.005	-.131
90	107	-.108	.032	.006	-.349
90	108	-.181	.038	-.088	-.311
90	109	-.091	.026	-.009	-.183
90	110	-.043	.023	.041	-.171
90	111	-.159	.037	-.058	-.330
90	112	-.108	.028	.026	-.241
90	113	-.060	.029	.084	-.249
90	114	-.250	.060	-.102	-.480
90	115	-.130	.041	-.017	-.331
90	116	-.328	.074	-.160	-.595
90	117	-.061	.020	.015	-.160
90	118	-.149	.045	-.022	-.379
90	119	.016	.055	.213	-.203
90	120	-.109	.078	.126	-.455
90	121	-.388	.080	-.179	-.704
90	122	-.285	.062	-.076	-.609
90	123	-.047	.034	.084	-.248
90	124	.010	.090	.288	-.356
90	125	-.345	.075	-.139	-.752
90	126	-.387	.088	-.150	-.764
90	127	-.040	.034	.082	-.215
90	128	-.064	.035	.045	-.293
90	129	-.200	.059	-.056	-.550
90	130	-.351	.082	-.173	-.839
90	131	-.021	.051	.212	-.203
90	132	-.136	.074	.079	-.478
90	133	-.009	.067	.357	-.252
90	134	-.143	.044	-.015	-.349
90	135	-.048	.024	.051	-.166
90	136	-.398	.089	-.126	-.811
90	137	.027	.075	.306	-.339
90	138	-.296	.079	-.074	-.787
90	139	-.087	.034	.018	-.262

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
90	140	-.260	.064	-.061	-.557
90	141	-.401	.081	-.215	-.695
90	142	-.043	.053	.230	-.167
90	143	-.064	.070	.208	-.393
90	144	-.155	.045	-.014	-.388
90	145	-.056	.025	.016	-.184
90	146	-.340	.064	-.184	-.543
90	147	-.070	.029	.036	-.192
90	148	-.235	.054	-.070	-.451
90	149	-.028	.043	.110	-.248
90	150	-.158	.034	-.058	-.353
90	151	-.081	.040	.051	-.325
90	152	-.163	.043	-.060	-.364
90	153	-.276	.049	-.148	-.522
90	154	-.161	.047	-.019	-.411
90	155	-.126	.035	-.035	-.301
90	156	-.242	.058	-.088	-.596
90	157	-.112	.033	-.017	-.314
90	201	-.091	.024	-.025	-.226
90	203	-.049	.016	.011	-.133
90	204	.005	.025	.159	-.075
90	205	.010	.024	.140	-.091
90	206	-.035	.020	.060	-.126
90	209	-.014	.019	.070	-.087
90	212	-.000	.025	.112	-.060
90	213	-.008	.020	.062	-.114
90	226	.010	.032	.174	-.102
90	230	.042	.035	.259	-.046
90	232	-.022	.023	.058	-.209
90	233	.003	.020	.095	-.075
90	234	.004	.019	.085	-.083
90	235	-.025	.016	.047	-.090
90	236	.011	.028	.143	-.078
90	239	-.004	.022	.085	-.087
90	246	.018	.025	.136	-.063
90	251	-.017	.029	.110	-.121
90	252	-.017	.027	.126	-.181
90	253	.021	.036	.215	-.104
90	255	-.022	.021	.095	-.093
90	257	-.048	.019	.018	-.137
100	101	-.099	.042	.046	-.256
100	102	-.116	.019	-.038	-.215
100	103	-.209	.044	-.080	-.407
100	104	-.200	.033	-.111	-.305
100	105	-.113	.023	-.037	-.208
100	106	-.047	.017	.026	-.116
100	107	-.152	.038	-.042	-.309
100	108	-.190	.040	-.085	-.349
100	109	-.131	.031	-.024	-.248
100	110	-.021	.022	.056	-.137
100	111	-.221	.045	-.072	-.413
100	112	-.149	.044	-.032	-.340
100	113	-.028	.026	.072	-.187
100	114	-.307	.070	-.130	-.578
100	115	-.195	.056	-.046	-.417
100	116	-.365	.074	-.191	-.631
100	117	-.080	.026	.005	-.224
100	118	-.180	.058	-.017	-.454
100	119	.063	.043	.218	-.139
100	120	-.044	.047	.123	-.285
100	121	-.432	.092	-.215	-.782
100	122	-.336	.079	-.121	-.646
100	123	-.077	.044	.077	-.289
100	124	.096	.065	.316	-.211
100	125	-.393	.085	-.139	-.717
100	126	-.433	.086	-.206	-.733
100	127	-.051	.040	.072	-.292
100	128	-.076	.041	.047	-.276
100	129	-.232	.069	-.065	-.569
100	130	-.368	.074	-.188	-.706
100	131	-.005	.051	.195	-.210
100	132	-.145	.081	.082	-.682
100	133	.045	.068	.373	-.177
100	134	-.191	.067	-.005	-.586
100	135	-.059	.034	.044	-.311
100	136	-.370	.095	-.139	-.814
100	137	-.090	.089	.181	-.527
100	138	-.331	.098	-.081	-.807
100	139	-.086	.034	.065	-.231
100	140	-.275	.076	-.085	-.679
100	141	-.341	.066	-.134	-.652
100	142	.002	.053	.193	-.219
100	143	-.093	.069	.159	-.464
100	144	-.194	.062	-.054	-.521
100	145	-.059	.026	.035	-.184
100	146	-.276	.053	-.124	-.525
100	147	-.064	.029	.038	-.249
100	148	-.211	.048	-.028	-.394
100	149	-.053	.056	.146	-.308
100	150	-.157	.037	-.050	-.360
100	151	-.068	.028	.024	-.210
100	152	-.127	.034	-.035	-.327
100	153	-.234	.044	-.116	-.445
100	154	-.122	.037	-.001	-.376
100	155	-.089	.027	-.007	-.238
100	156	-.211	.053	-.062	-.485
100	157	-.106	.024	-.017	-.268
100	201	-.131	.059	-.028	-.470
100	203	-.051	.016	-.001	-.114
100	204	.008	.025	.105	-.135
100	205	-.003	.024	.078	-.159
100	206	-.062	.030	.012	-.189
100	209	-.008	.018	.066	-.082
100	212	.017	.027	.137	-.075
100	213	-.010	.017	.062	-.078
100	226	.020	.035	.192	-.070
100	230	.072	.057	.322	-.042
100	232	-.019	.024	.098	-.126
100	233	.017	.023	.134	-.052
100	234	.012	.022	.134	-.048
100	235	-.025	.018	.045	-.100
100	236	.036	.043	.224	-.071
100	239	-.019	.017	.047	-.082
100	246	.029	.032	.179	-.046
100	251	-.011	.026	.108	-.129
100	252	-.027	.023	.071	-.144
100	253	-.005	.026	.105	-.102
100	255	-.036	.017	.048	-.083
100	257	-.049	.018	.013	-.109
110	101	-.042	.031	.088	-.286
110	102	-.086	.019	-.015	-.153
110	103	-.215	.042	-.079	-.387
110	104	-.207	.035	-.098	-.336
110	105	-.065	.028	.085	-.156
110	106	-.016	.023	.088	-.077
110	107	-.192	.039	-.077	-.376
110	108	-.177	.037	-.089	-.326
110	109	-.183	.040	-.059	-.327
110	110	.002	.025	.099	-.072
110	111	-.285	.054	-.161	-.478
110	112	-.218	.054	-.057	-.436
110	113	.008	.031	.126	-.082
110	114	-.370	.082	-.167	-.614
110	115	-.276	.070	-.107	-.518
110	116	-.360	.077	-.178	-.596
110	117	-.092	.028	-.007	-.371
110	118	-.280	.074	-.074	-.556
110	119	.091	.039	.224	-.019
110	120	-.014	.033	.090	-.151
110	121	-.453	.090	-.226	-.780
110	122	-.419	.092	-.167	-.753
110	123	-.123	.057	.050	-.369
110	124	.117	.054	.314	-.102
110	125	-.431	.096	-.161	-.804
110	126	-.441	.092	-.200	-.826
110	127	-.074	.060	.111	-.474
110	128	-.120	.065	.074	-.435
110	129	-.328	.102	-.062	-.808
110	130	-.407	.096	-.203	-.947
110	131	-.009	.052	.171	-.195

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
110	132	-.126	.066	.081	-.489
110	133	-.022	.063	.288	-.174
110	134	-.241	.090	.003	-.760
110	135	-.067	.036	.066	-.387
110	136	-.393	.103	-.093	-.906
110	137	-.229	.093	.076	-.619
110	138	-.410	.114	-.134	-.966
110	139	-.099	.045	.090	-.307
110	140	-.337	.108	-.089	-.989
110	141	-.371	.073	-.169	-.700
110	142	-.058	.060	.163	-.297
110	143	-.101	.066	.082	-.458
110	144	-.246	.085	-.054	-.610
110	145	-.070	.038	.057	-.305
110	146	-.274	.052	-.118	-.539
110	147	-.062	.040	.081	-.276
110	148	-.205	.060	-.030	-.458
110	149	-.068	.062	.144	-.402
110	150	-.181	.059	-.015	-.480
110	151	-.064	.030	.048	-.234
110	152	-.109	.029	-.017	-.268
110	153	-.194	.036	-.057	-.402
110	154	-.103	.041	.064	-.325
110	155	-.064	.029	.073	-.205
110	156	-.145	.052	-.007	-.394
110	157	-.081	.024	.035	-.175
110	201	-.180	.077	.025	-.558
110	203	-.057	.018	-.006	-.154
110	204	-.002	.028	.127	-.154
110	205	-.035	.028	.059	-.208
110	206	-.107	.042	-.008	-.307
110	209	-.016	.021	.082	-.108
110	212	-.015	.025	.112	-.085
110	213	-.008	.018	.068	-.084
110	226	.067	.050	.241	-.075
110	230	.155	.077	.413	-.027
110	232	-.014	.022	.070	-.107
110	233	.032	.026	.142	-.041
110	234	.023	.023	.122	-.042
110	235	-.019	.019	.061	-.106
110	236	.077	.051	.319	-.067
110	239	-.017	.016	.059	-.077
110	246	.066	.040	.294	-.035
110	251	-.007	.025	.135	-.101
110	252	-.028	.021	.062	-.115
110	253	-.005	.022	.125	-.070
110	255	.040	.014	.010	-.090
110	257	-.057	.016	.001	-.115
120	101	.009	.037	.149	-.146
120	102	-.062	.024	.038	-.169
120	103	-.210	.046	-.102	-.403
120	104	-.189	.032	-.093	-.329
120	105	-.020	.034	.113	-.144
120	106	.035	.037	.197	-.073
120	107	-.210	.041	-.100	-.428
120	108	-.157	.040	-.042	-.313
120	109	-.211	.037	-.094	-.381
120	110	.032	.030	.126	-.052
120	111	-.294	.050	-.181	-.452
120	112	-.265	.054	-.113	-.488
120	113	.035	.034	.166	-.062
120	114	-.377	.078	-.194	-.645
120	115	-.312	.067	-.165	-.545
120	116	-.306	.070	-.137	-.561
120	117	-.119	.031	-.015	-.251
120	118	-.334	.080	-.120	-.650
120	119	.090	.044	.236	-.049
120	120	-.044	.033	.067	-.159
120	121	-.400	.080	-.172	-.676
120	122	-.459	.103	-.195	-.812
120	123	-.184	.062	.047	-.433
120	124	.109	.054	.287	-.054
120	125	-.466	.099	-.245	-.849
120	126	-.391	.080	-.158	-.739
120	127	-.091	.062	.093	-.556
120	128	-.152	.074	.063	-.616
120	129	-.375	.123	-.067	-1.140
120	130	-.421	.100	-.206	-.915
120	131	-.100	.061	.074	-.330
120	132	-.163	.059	.038	-.357
120	133	-.082	.069	.141	-.323
120	134	-.282	.096	-.005	-.715
120	135	-.070	.029	.043	-.277
120	136	-.402	.111	-.158	-1.057
120	137	-.343	.093	-.040	-.723
120	138	-.392	.104	-.149	-.979
120	139	-.119	.066	.068	-.426
120	140	-.376	.122	-.081	-.989
120	141	-.421	.086	-.181	-.929
120	142	-.149	.070	.043	-.492
120	143	-.137	.082	.077	-.623
120	144	-.271	.088	.011	-.735
120	145	-.072	.045	.059	-.490
120	146	-.310	.067	-.108	-.654
120	147	-.065	.051	.112	-.290
120	148	-.234	.088	.002	-.653
120	149	-.088	.060	.119	-.410
120	150	-.184	.069	-.024	-.585
120	151	-.080	.038	.071	-.270
120	152	-.117	.031	-.022	-.279
120	153	-.196	.049	-.014	-.440
120	154	-.095	.055	.073	-.415
120	155	-.055	.035	.104	-.221
120	156	-.091	.041	.033	-.324
120	157	-.055	.025	.066	-.184
120	201	-.141	.054	.017	-.377
120	203	-.061	.023	.004	-.181
120	204	-.015	.038	.112	-.188
120	205	-.073	.045	.061	-.290
120	206	-.144	.052	.012	-.362
120	209	-.024	.025	.071	-.197
120	212	-.011	.027	.090	-.115
120	213	-.033	.023	.040	-.154
120	226	.096	.047	.265	-.048
120	230	.190	.070	.415	-.018
120	232	-.017	.021	.075	-.100
120	233	.041	.026	.121	-.037
120	234	.018	.026	.142	-.083
120	235	-.028	.027	.128	-.116
120	236	.102	.053	.335	-.043
120	239	-.009	.021	.126	-.077
120	246	.098	.044	.292	-.053
120	251	-.022	.021	.061	-.118
120	252	-.028	.021	.062	-.110
120	253	.011	.028	.136	-.068
120	255	-.037	.016	.020	-.098
120	257	-.055	.016	-.003	-.116
130	101	.058	.046	.272	-.073
130	102	-.012	.030	.108	-.112
130	103	-.188	.041	-.092	-.439
130	104	-.148	.029	-.049	-.266
130	105	.032	.044	.251	-.089
130	106	.089	.046	.252	-.035
130	107	-.192	.039	-.081	-.404
130	108	-.102	.034	.013	-.256
130	109	-.221	.040	-.108	-.354
130	110	.055	.039	.218	-.056
130	111	-.279	.044	-.170	-.446
130	112	-.308	.057	-.134	-.493
130	113	.057	.043	.222	-.070
130	114	-.342	.063	-.194	-.596
130	115	-.313	.059	-.168	-.532
130	116	-.224	.057	-.054	-.516
130	117	-.147	.028	-.040	-.249
130	118	-.351	.078	-.144	-.638
130	119	.074	.048	.240	-.070
130	120	-.088	.038	.045	-.258
130	121	-.291	.068	-.134	-.572
130	122	-.447	.105	-.183	-.857
130	123	-.222	.064	-.024	-.463

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
130	124	.076	.055	.258	-.081
130	125	-.449	.102	-.191	-.792
130	126	-.288	.075	-.097	-.573
130	127	-.129	.067	.100	-.496
130	128	-.208	.080	.020	-.605
130	129	-.390	.105	-.088	-.767
130	130	-.407	.105	-.203	-.945
130	131	-.242	.071	.024	-.546
130	132	-.251	.070	-.017	-.483
130	133	-.222	.077	.003	-.491
130	134	-.313	.089	-.010	-.823
130	135	-.099	.032	.016	-.338
130	136	-.370	.090	-.178	-1.332
130	137	-.362	.085	-.130	-.759
130	138	-.335	.075	-.157	-.693
130	139	-.146	.087	.132	-.694
130	140	-.356	.089	-.124	-.902
130	141	-.401	.092	-.179	-.783
130	142	-.239	.073	-.026	-.542
130	143	-.187	.085	.020	-.525
130	144	-.286	.086	-.045	-.685
130	145	-.086	.051	.102	-.649
130	146	-.357	.086	-.143	-1.004
130	147	-.078	.064	.144	-.447
130	148	-.270	.106	.008	-.982
130	149	-.128	.083	.097	-.629
130	150	-.215	.069	-.024	-.720
130	151	-.101	.045	.146	-.348
130	152	-.141	.040	-.022	-.347
130	153	-.232	.074	-.022	-.644
130	154	-.111	.068	.068	-.467
130	155	-.058	.045	.094	-.304
130	156	-.073	.041	.098	-.327
130	157	-.046	.025	.098	-.143
130	201	-.107	.052	.077	-.413
130	203	-.067	.030	.006	-.300
130	204	-.054	.036	.114	-.208
130	205	-.097	.047	.068	-.314
130	206	-.137	.047	-.008	-.405
130	209	-.029	.030	.075	-.183
130	212	-.042	.033	.158	-.176
130	213	-.095	.043	.040	-.331
130	226	.067	.044	.309	-.062
130	230	.144	.060	.461	.001
130	232	-.026	.032	.107	-.180
130	233	-.005	.029	.090	-.116
130	234	-.036	.034	.095	-.175
130	235	-.057	.032	.083	-.312
130	236	.068	.042	.250	-.068
130	239	-.020	.033	.132	-.157
130	246	.099	.047	.320	-.033
130	251	-.032	.022	.114	-.135
130	252	-.012	.029	.135	-.120
130	253	.028	.038	.212	-.082
130	255	-.038	.023	.065	-.118
130	257	-.050	.016	.001	-.108
140	101	.104	.057	.374	-.035
140	102	.028	.040	.181	-.078
140	103	-.148	.029	-.054	-.322
140	104	-.097	.032	.035	-.220
140	105	.082	.057	.292	-.056
140	106	.144	.059	.349	-.032
140	107	-.150	.033	-.017	-.356
140	108	-.045	.035	.066	-.171
140	109	-.211	.038	-.111	-.352
140	110	.078	.047	.223	-.040
140	111	-.253	.045	-.136	-.394
140	112	-.310	.056	-.152	-.520
140	113	.057	.045	.213	-.059
140	114	-.295	.063	-.137	-.562
140	115	-.303	.061	-.154	-.527
140	116	-.140	.050	.088	-.376
140	117	-.163	.031	-.070	-.300
140	118	-.342	.080	-.150	-.620
140	119	.035	.048	.208	-.118
140	120	-.144	.039	-.005	-.317
140	121	-.186	.059	-.029	-.428
140	122	-.400	.092	-.182	-.763
140	123	-.227	.054	-.069	-.438
140	124	.011	.059	.196	-.205
140	125	-.402	.095	-.189	-.704
140	126	-.190	.069	.015	-.525
140	127	-.149	.064	.098	-.468
140	128	-.215	.074	.027	-.578
140	129	-.328	.091	-.070	-.848
140	130	-.373	.096	-.181	-.904
140	131	-.358	.071	-.165	-.609
140	132	-.328	.072	-.105	-.602
140	133	-.323	.069	-.137	-.550
140	134	-.326	.086	-.052	-.725
140	135	-.141	.045	.013	-.357
140	136	-.326	.072	-.165	-.778
140	137	-.348	.076	-.165	-.696
140	138	-.301	.069	-.161	-.708
140	139	-.169	.092	.113	-.860
140	140	-.339	.078	-.140	-.652
140	141	-.380	.090	-.165	-1.013
140	142	-.295	.075	-.084	-.592
140	143	-.240	.091	-.005	-.612
140	144	-.293	.093	.063	-.832
140	145	-.101	.044	.050	-.428
140	146	-.345	.092	-.055	-.805
140	147	-.101	.077	.144	-.597
140	148	-.282	.096	-.035	-.759
140	149	-.168	.098	.088	-.783
140	150	-.237	.071	-.008	-.599
140	151	-.132	.056	.046	-.452
140	152	-.168	.050	-.035	-.464
140	153	-.260	.083	-.032	-.747
140	154	-.129	.071	.108	-.442
140	155	-.076	.059	.151	-.461
140	156	-.073	.046	.105	-.265
140	157	-.055	.029	.103	-.183
140	201	-.115	.056	.037	-.571
140	203	-.093	.058	-.001	-.474
140	204	-.067	.041	.077	-.413
140	205	-.088	.042	.075	-.319
140	206	-.131	.053	.027	-.459
140	209	-.024	.039	.115	-.319
140	212	-.048	.035	.124	-.278
140	213	-.124	.043	.011	-.321
140	226	.013	.040	.181	-.211
140	230	.071	.048	.296	-.053
140	232	-.084	.055	.092	-.419
140	233	-.067	.028	.021	-.190
140	234	-.068	.034	.075	-.220
140	235	-.063	.035	.083	-.206
140	236	-.026	.040	.140	-.175
140	239	-.049	.036	.180	-.196
140	246	-.001	.043	.159	-.137
140	251	-.036	.031	.085	-.144
140	252	-.023	.040	.182	-.197
140	253	-.025	.047	.166	-.221
140	255	-.056	.027	.057	-.165
140	257	-.050	.018	.013	-.151
150	101	.162	.068	.441	-.003
150	102	.089	.051	.263	-.048
150	103	-.119	.024	-.027	-.253
150	104	-.037	.040	.121	-.162
150	105	.130	.066	.394	-.044
150	106	.190	.070	.418	.008
150	107	-.103	.032	.002	-.236
150	108	.011	.043	.168	-.139
150	109	-.183	.031	-.096	-.304
150	110	.104	.052	.276	-.020
150	111	-.197	.040	-.072	-.401
150	112	-.284	.052	-.160	-.468
150	113	.052	.050	.229	-.085
150	114	-.222	.056	-.073	-.496
150	115	-.263	.056	-.107	-.544

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
150	116	-.055	.053	.124	-.265
150	117	-.164	.028	-.082	-.285
150	118	-.321	.073	-.127	-.585
150	119	-.012	.043	.140	-.174
150	120	-.173	.039	-.061	-.342
150	121	-.099	.059	.117	-.336
150	122	-.379	.079	-.165	-.711
150	123	-.225	.050	-.079	-.383
150	124	-.051	.063	.149	-.303
150	125	-.390	.081	-.204	-.735
150	126	-.076	.060	.118	-.300
150	127	-.177	.057	.013	-.404
150	128	-.223	.070	-.017	-.474
150	129	-.313	.086	-.088	-.688
150	130	-.304	.076	-.133	-.873
150	131	-.399	.066	-.216	-.683
150	132	-.371	.078	-.178	-.700
150	133	-.375	.072	-.182	-.659
150	134	-.303	.076	-.075	-.654
150	135	-.179	.057	-.047	-.548
150	136	-.306	.065	-.166	-.883
150	137	-.332	.075	-.154	-.749
150	138	-.275	.068	-.139	-.731
150	139	-.177	.079	.077	-.638
150	140	-.306	.065	-.129	-.659
150	141	-.322	.075	-.156	-.889
150	142	-.320	.074	-.120	-.618
150	143	-.267	.085	-.031	-.639
150	144	-.285	.096	-.020	-.912
150	145	-.110	.033	.031	-.250
150	146	-.344	.081	-.080	-.843
150	147	-.155	.097	.116	-.860
150	148	-.278	.072	-.079	-.645
150	149	-.223	.101	.057	-.921
150	150	-.240	.074	-.005	-.667
150	151	-.189	.073	.038	-.606
150	152	-.216	.061	-.040	-.523
150	153	-.267	.071	-.044	-.636
150	154	-.143	.074	.118	-.596
150	155	-.102	.066	.101	-.685
150	156	-.096	.054	.082	-.492
150	157	-.068	.035	.053	-.254
150	201	-.148	.060	.057	-.468
150	202	-.133	.077	-.010	-.505
150	204	-.109	.061	.027	-.810
150	205	-.109	.045	.018	-.498
150	206	-.146	.052	.025	-.471
150	209	-.062	.061	.115	-.370
150	212	-.089	.060	.077	-.409
150	213	-.147	.047	-.027	-.369

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
150	226	-.054	.035	.082	-.176
150	230	-.014	.041	.136	-.148
150	232	-.168	.070	.042	-.488
150	233	-.112	.032	-.032	-.264
150	234	-.087	.041	.062	-.243
150	235	-.070	.034	.071	-.295
150	236	-.090	.034	.045	-.205
150	239	-.043	.045	.162	-.216
150	246	-.076	.042	.092	-.315
150	251	-.045	.046	.217	-.211
150	252	-.090	.060	.110	-.436
150	253	-.086	.046	.080	-.326
150	255	-.052	.030	.075	-.158
150	257	-.057	.019	.009	-.159
160	101	.218	.086	.543	.008
160	102	.156	.063	.406	-.017
160	103	-.087	.022	-.004	-.204
160	104	.034	.046	.227	-.093
160	105	.180	.070	.472	-.039
160	106	.238	.087	.569	.049
160	107	-.048	.035	.089	-.163
160	108	-.083	.050	.262	-.074
160	109	-.144	.028	-.051	-.266
160	110	.128	.055	.313	-.020
160	111	-.132	.035	-.024	-.270
160	112	-.257	.047	-.120	-.432
160	113	.053	.048	.233	-.080
160	114	-.144	.048	-.001	-.318
160	115	-.208	.047	-.065	-.429
160	116	-.011	.053	.203	-.144
160	117	-.161	.026	-.093	-.249
160	118	-.304	.064	-.142	-.594
160	119	-.066	.046	.084	-.225
160	120	-.193	.040	-.081	-.338
160	121	-.013	.056	.188	-.237
160	122	-.354	.071	-.182	-.669
160	123	-.216	.047	-.095	-.404
160	124	-.121	.062	.056	-.358
160	125	-.359	.069	-.196	-.714
160	126	.001	.062	.242	-.198
160	127	-.191	.049	-.017	-.393
160	128	-.228	.061	-.056	-.504
160	129	-.293	.075	-.094	-.706
160	130	-.268	.055	-.125	-.584
160	131	-.402	.078	-.210	-.671
160	132	-.413	.086	-.211	-.734
160	133	-.380	.071	-.201	-.648
160	134	-.305	.066	-.125	-.634
160	135	-.234	.074	-.080	-.549
160	136	-.288	.049	-.145	-.555

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
160	137	-.338	.073	-.151	-.664
160	138	-.264	.067	-.138	-.761
160	139	-.171	.058	.006	-.508
160	140	-.287	.076	-.133	-.875
160	141	-.306	.060	-.160	-.749
160	142	-.314	.070	-.116	-.576
160	143	-.289	.076	-.067	-.647
160	144	-.277	.088	.020	-.736
160	145	-.123	.026	-.019	-.218
160	146	-.330	.076	-.165	-.790
160	147	-.169	.086	-.092	-.844
160	148	-.255	.062	-.065	-.619
160	149	-.253	.092	-.005	-.660
160	150	-.251	.080	-.048	-.809
160	151	-.225	.074	-.007	-.575
160	152	-.251	.063	-.068	-.576
160	153	-.254	.055	-.070	-.469
160	154	-.175	.091	.106	-.738
160	155	-.121	.050	.044	-.494
160	156	-.124	.069	.095	-.565
160	157	-.088	.036	.023	-.288
160	201	-.173	.066	-.013	-.606
160	203	-.191	.095	.006	-.616
160	204	-.154	.060	-.020	-.471
160	205	-.143	.048	-.015	-.575
160	206	-.167	.050	-.015	-.525
160	209	-.122	.075	.058	-.469
160	212	-.143	.064	.040	-.422
160	213	-.172	.045	-.028	-.347
160	226	-.101	.038	.022	-.255
160	230	-.086	.042	.058	-.222
160	232	-.198	.070	-.000	-.515
160	233	-.121	.037	.004	-.272
160	234	-.093	.052	.139	-.285
160	235	-.095	.033	.011	-.330
160	236	-.115	.036	.018	-.278
160	239	-.025	.047	.175	-.196
160	246	-.099	.041	.048	-.371
160	251	-.059	.057	.168	-.291
160	252	-.116	.059	.106	-.389
160	253	-.090	.045	.050	-.301
160	255	-.054	.031	.151	-.192
160	257	-.063	.018	-.001	-.129
170	101	.242	.090	.575	-.005
170	102	.204	.075	.423	-.003
170	103	-.042	.024	.058	-.155
170	104	.092	.056	.305	-.052
170	105	.200	.072	.438	.011
170	106	.254	.079	.563	.061
170	107	.010	.042	.191	-.130

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
170	108	.135	.058	.321	-.024
170	109	-.102	.027	.011	-.212
170	110	.132	.058	.331	-.047
170	111	-.060	.040	.078	-.198
170	112	-.205	.041	-.108	-.377
170	113	.042	.045	.228	-.093
170	114	-.051	.052	.105	-.243
170	115	-.148	.043	-.012	-.326
170	116	.077	.055	.281	-.106
170	117	-.153	.024	-.088	-.251
170	118	-.292	.063	-.138	-.515
170	119	-.110	.044	.022	-.276
170	120	-.218	.042	-.092	-.367
170	121	.053	.054	.276	-.122
170	122	-.279	.064	-.107	-.573
170	123	-.205	.040	-.101	-.365
170	124	-.195	.061	-.034	-.412
170	125	-.317	.064	-.143	-.603
170	126	.071	.065	.302	-.140
170	127	-.206	.042	-.056	-.342
170	128	-.236	.052	-.081	-.451
170	129	-.290	.066	-.088	-.683
170	130	-.261	.049	-.135	-.560
170	131	-.410	.077	-.203	-.784
170	132	-.416	.074	-.237	-.779
170	133	-.329	.061	-.175	-.646
170	134	-.305	.061	-.153	-.618
170	135	-.257	.079	-.081	-.597
170	136	-.273	.048	-.161	-.532
170	137	-.323	.075	-.084	-.711
170	138	-.263	.070	-.120	-.793
170	139	-.186	.045	-.002	-.387
170	140	-.298	.082	-.106	-.913
170	141	-.303	.061	-.175	-.581
170	142	-.324	.073	-.094	-.622
170	143	-.310	.069	-.037	-.623
170	144	-.290	.079	-.038	-.645
170	145	-.137	.022	-.067	-.222
170	146	-.299	.054	-.169	-.607
170	147	-.175	.064	.050	-.485
170	148	-.245	.065	-.042	-.619
170	149	-.279	.079	.007	-.738
170	150	-.268	.077	-.053	-.653
170	151	-.231	.065	-.039	-.688
170	152	-.267	.060	-.080	-.529
170	153	-.252	.058	-.088	-.510
170	154	-.205	.094	.064	-.660
170	155	-.129	.032	-.022	-.305
170	156	-.148	.064	.060	-.580
170	157	-.123	.046	-.019	-.397

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
170	201	-.198	.076	-.010	-.685
170	203	-.210	.106	-.032	-.751
170	204	-.189	.063	-.005	-.603
170	205	-.176	.060	-.032	-.528
170	206	-.177	.048	-.018	-.439
170	209	-.170	.082	.051	-.545
170	212	-.179	.067	.047	-.516
170	213	-.176	.048	-.022	-.360
170	226	-.120	.040	-.010	-.248
170	230	-.116	.042	.020	-.250
170	232	-.179	.059	-.020	-.429
170	233	-.104	.040	.051	-.227
170	234	-.100	.050	.104	-.295
170	235	-.123	.033	-.027	-.298
170	236	-.105	.048	.074	-.288
170	239	-.026	.044	.208	-.215
170	246	-.103	.043	.042	-.285
170	251	-.098	.060	.168	-.398
170	252	-.114	.054	.169	-.338
170	253	-.098	.051	.082	-.310
170	255	-.044	.025	.057	-.161
170	257	-.067	.018	-.003	-.151
180	101	.268	.093	.582	.041
180	102	.229	.075	.472	.062
180	103	-.009	.027	.088	-.104
180	104	.146	.062	.402	-.015
180	105	.211	.076	.545	.008
180	106	.266	.093	.564	.059
180	107	.058	.048	.235	-.072
180	108	.167	.060	.377	.020
180	109	-.056	.027	.060	-.173
180	110	.129	.059	.358	-.018
180	111	.004	.045	.160	-.160
180	112	-.158	.037	-.053	-.308
180	113	.025	.041	.182	-.113
180	114	.021	.054	.203	-.181
180	115	-.081	.043	.047	-.274
180	116	.109	.058	.356	-.025
180	117	-.136	.022	-.058	-.217
180	118	-.240	.057	-.107	-.473
180	119	-.157	.040	-.049	-.374
180	120	-.222	.040	-.117	-.376
180	121	.092	.059	.300	-.070
180	122	-.215	.067	-.033	-.459
180	123	-.185	.040	-.076	-.326
180	124	-.263	.062	-.092	-.504
180	125	-.237	.068	-.015	-.521
180	126	.108	.066	.314	-.101
180	127	-.211	.040	-.107	-.362
180	128	-.252	.050	-.129	-.432

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
180	129	-.294	.066	-.153	-.682
180	130	-.281	.058	-.128	-.565
180	131	-.356	.077	-.179	-.681
180	132	-.415	.075	-.225	-.804
180	133	-.324	.066	-.141	-.732
180	134	-.322	.065	-.172	-.617
180	135	-.168	.077	-.029	-.600
180	136	-.277	.048	-.144	-.483
180	137	-.311	.074	-.105	-.667
180	138	-.273	.075	-.113	-.796
180	139	-.208	.041	-.059	-.372
180	140	-.279	.074	-.077	-.862
180	141	-.291	.054	-.163	-.585
180	142	-.313	.072	-.096	-.644
180	143	-.313	.067	-.136	-.574
180	144	-.291	.070	-.059	-.570
180	145	-.145	.023	-.077	-.225
180	146	-.313	.053	-.161	-.612
180	147	-.182	.047	-.022	-.362
180	148	-.252	.078	-.001	-.778
180	149	-.264	.066	-.059	-.552
180	150	-.276	.068	-.060	-.645
180	151	-.233	.059	-.044	-.541
180	152	-.275	.065	-.040	-.576
180	153	-.269	.078	-.032	-.791
180	154	-.208	.077	.015	-.604
180	155	-.153	.028	-.050	-.265
180	156	-.142	.041	-.037	-.488
180	157	-.206	.057	-.044	-.449
180	201	-.234	.083	-.038	-.708
180	203	-.230	.124	-.030	-.728
180	204	-.224	.068	-.050	-.583
180	205	-.217	.077	-.046	-.702
180	206	-.181	.048	-.035	-.411
180	209	-.211	.094	.016	-.599
180	212	-.217	.076	.007	-.581
180	213	-.199	.054	-.025	-.478
180	226	-.110	.039	-.000	-.262
180	230	-.109	.040	-.018	-.239
180	232	-.162	.050	-.020	-.386
180	233	-.090	.038	.025	-.225
180	234	-.088	.048	.100	-.292
180	235	-.158	.052	-.039	-.471
180	236	-.097	.043	.072	-.252
180	239	-.010	.040	.118	-.237
180	246	-.091	.043	.065	-.302
180	251	-.120	.055	.080	-.328
180	252	-.098	.064	.189	-.354
180	253	-.069	.047	.094	-.256
180	255	-.031	.019	.050	-.130

APPENDIX A -- PRESSURE DATA: HELIOS TENSION STRUCTURE -- NO WALL

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
180	257	-.069	.016	-.022	-.151
190	101	.264	.087	.604	.053
190	102	.241	.080	.550	.040
190	103	.022	.033	.134	-.096
190	104	.196	.074	.444	.018
190	105	.221	.082	.569	.033
190	106	.256	.088	.536	.061
190	107	.118	.057	.333	-.033
190	108	.183	.062	.411	.018
190	109	-.006	.034	.134	-.118
190	110	.135	.058	.327	-.023
190	111	.072	.053	.248	-.070
190	112	-.090	.037	.028	-.199
190	113	-.011	.037	.134	-.148
190	114	.094	.060	.307	-.121
190	115	-.002	.049	.158	-.162
190	116	.126	.058	.306	-.027
190	117	-.090	.027	-.005	-.179
190	118	-.173	.056	.004	-.377
190	119	-.191	.045	-.031	-.358
190	120	-.218	.040	-.083	-.356
190	121	.090	.053	.293	-.058
190	122	-.112	.063	.062	-.372
190	123	-.131	.036	-.008	-.258
190	124	-.311	.063	-.110	-.559
190	125	-.143	.068	.040	-.392
190	126	-.127	.067	.371	-.055
190	127	-.200	.041	-.088	-.338
190	128	-.256	.052	-.115	-.452
190	129	-.331	.075	-.144	-.663
190	130	-.313	.064	-.165	-.594
190	131	-.347	.069	-.191	-.746
190	132	-.401	.083	-.201	-.752
190	133	-.337	.073	-.177	-.696
190	134	-.352	.061	-.183	-.603
190	135	-.074	.035	.065	-.385
190	136	-.298	.056	-.163	-.586
190	137	-.328	.085	-.133	-.763
190	138	-.303	.067	-.120	-.708
190	139	-.232	.038	-.115	-.362
190	140	-.306	.072	-.052	-.675
190	141	-.313	.062	-.174	-.667
190	142	-.312	.080	-.086	-.718
190	143	-.314	.073	-.118	-.706
190	144	-.308	.064	-.113	-.579
190	145	-.150	.021	-.084	-.230
190	146	-.316	.058	-.171	-.639
190	147	-.220	.045	-.084	-.393
190	148	-.283	.083	-.058	-.802
190	149	-.291	.075	-.045	-.613
190	150	-.285	.055	-.106	-.507
190	151	-.223	.065	.025	-.548
190	152	-.268	.067	-.068	-.513
190	153	-.301	.092	-.083	-.906
190	154	-.208	.054	-.029	-.437
190	155	-.170	.026	-.100	-.264
190	156	-.139	.026	-.054	-.241
190	157	-.202	.046	-.083	-.412
190	201	-.246	.081	.010	-.727
190	203	-.174	.102	-.020	-.773
190	204	-.247	.074	-.080	-.879
190	205	-.228	.076	-.029	-.704
190	206	-.177	.049	-.042	-.442
190	209	-.224	.084	-.029	-.635
190	212	-.231	.087	-.015	-.638
190	213	-.207	.058	-.041	-.490
190	226	-.099	.043	.047	-.268
190	230	-.105	.042	.042	-.260
190	232	-.173	.064	.072	-.449
190	233	-.061	.043	.082	-.227
190	234	-.099	.051	.047	-.355
190	235	-.257	.118	-.065	-.922
190	236	-.075	.042	.079	-.218
190	239	.003	.029	.108	-.165
190	246	-.059	.037	.069	-.191
190	251	-.103	.058	.106	-.357
190	252	-.088	.051	.126	-.285
190	253	-.051	.046	.144	-.212
190	255	-.031	.020	.032	-.124
190	257	-.080	.018	-.029	-.148
200	101	.240	.083	.538	.010
200	102	.249	.081	.470	.059
200	103	.063	.039	.191	-.039
200	104	.208	.077	.457	.031
200	105	.186	.077	.460	.001
200	106	.242	.082	.501	.038
200	107	.154	.065	.380	-.005
200	108	.196	.065	.373	.029
200	109	.044	.042	.195	-.077
200	110	.113	.053	.322	-.038
200	111	.132	.058	.330	-.022
200	112	-.010	.042	.143	-.160
200	113	-.039	.032	.114	-.170
200	114	.143	.062	.353	-.045
200	115	.076	.052	.265	-.081
200	116	.101	.058	.310	-.047
200	117	-.025	.031	.100	-.127
200	118	-.076	.050	.092	-.253
200	119	-.220	.046	-.088	-.379
200	120	-.195	.040	-.079	-.371
200	121	.064	.054	.240	-.105
200	122	-.011	.064	.208	-.243
200	123	-.060	.037	.054	-.227
200	124	-.358	.067	-.178	-.643
200	125	-.016	.065	.223	-.245
200	126	.103	.067	.337	-.127
200	127	-.171	.036	-.066	-.297
200	128	-.230	.047	-.106	-.376
200	129	-.365	.068	-.160	-.662
200	130	-.361	.072	-.156	-.671
200	131	-.351	.070	-.201	-.740
200	132	-.391	.078	-.181	-.716
200	133	-.365	.077	-.157	-.676
200	134	-.330	.061	-.173	-.585
200	135	-.026	.036	.124	-.370
200	136	-.322	.060	-.163	-.721
200	137	-.332	.095	-.116	-.943
200	138	-.312	.076	-.129	-.651
200	139	-.243	.042	-.133	-.393
200	140	-.330	.076	-.101	-.813
200	141	-.334	.061	-.170	-.709
200	142	-.299	.082	-.031	-.678
200	143	-.289	.077	-.031	-.575
200	144	-.324	.065	-.130	-.636
200	145	-.138	.020	-.055	-.205
200	146	-.339	.065	-.163	-.792
200	147	-.233	.046	-.126	-.398
200	148	-.277	.075	-.035	-.654
200	149	-.268	.097	.058	-.863
200	150	-.313	.054	-.136	-.511
200	151	-.201	.071	.006	-.545
200	152	-.262	.072	-.045	-.643
200	153	-.311	.091	-.024	-.765
200	154	-.228	.047	-.079	-.403
200	155	-.177	.026	-.103	-.269
200	156	-.155	.025	-.088	-.247
200	157	-.184	.043	-.072	-.423
200	201	-.229	.082	-.005	-.682
200	203	-.139	.045	-.025	-.469
200	204	-.250	.073	-.066	-.651
200	205	-.219	.077	.001	-.664
200	206	-.167	.046	-.025	-.392
200	209	-.226	.078	-.059	-.604
200	212	-.245	.089	-.028	-.707
200	213	-.213	.064	-.008	-.488
200	226	-.081	.045	.050	-.275
200	230	-.091	.039	-.001	-.289
200	232	-.163	.071	.139	-.392
200	233	-.002	.046	.151	-.181
200	234	-.086	.057	.059	-.431

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
200	235	-.277	.124	-.051	-.901
200	236	-.030	.047	.134	-.223
200	239	.014	.028	.159	-.180
200	246	-.026	.034	.102	-.156
200	251	-.066	.052	.120	-.267
200	252	-.079	.048	.074	-.305
200	253	-.003	.042	.184	-.191
200	255	-.046	.026	.035	-.164
200	257	-.092	.022	-.028	-.209
210	101	.209	.081	.504	.023
210	102	.217	.075	.472	.033
210	103	.086	.049	.241	-.029
210	104	.203	.073	.491	.008
210	105	.137	.064	.364	-.014
210	106	.190	.074	.456	.025
210	107	.188	.071	.472	.015
210	108	.171	.061	.358	-.015
210	109	.097	.057	.337	-.059
210	110	.089	.046	.251	-.039
210	111	.167	.062	.402	.014
210	112	.055	.045	.255	-.088
210	113	-.078	.030	.050	-.195
210	114	.160	.061	.376	.011
210	115	.135	.057	.337	-.022
210	116	.049	.056	.278	-.145
210	117	.050	.043	.214	-.070
210	118	.012	.053	.181	-.175
210	119	-.249	.051	-.127	-.452
210	120	-.169	.035	-.016	-.285
210	121	-.002	.056	.201	-.209
210	122	.072	.065	.312	-.149
210	123	.012	.042	.163	-.162
210	124	-.381	.073	-.195	-.729
210	125	.072	.063	.316	-.199
210	126	.054	.063	.260	-.153
210	127	-.131	.037	-.029	-.266
210	128	-.194	.047	-.077	-.360
210	129	-.376	.071	-.188	-.636
210	130	-.410	.073	-.215	-.706
210	131	-.363	.069	-.192	-.663
210	132	-.374	.075	-.140	-.721
210	133	-.377	.078	-.163	-.762
210	134	-.287	.056	-.112	-.576
210	135	.016	.041	.176	-.148
210	136	-.392	.094	-.195	-1.116
210	137	-.375	.101	-.148	-.876
210	138	-.367	.081	-.165	-.722
210	139	-.225	.040	-.130	-.378
210	140	-.349	.070	-.165	-.688
210	141	-.366	.081	-.180	-.886
210	142	-.313	.094	-.073	-.756
210	143	-.277	.082	-.049	-.571
210	144	-.376	.072	-.199	-.589
210	145	-.104	.023	-.010	-.187
210	146	-.380	.095	-.115	-.954
210	147	-.237	.046	-.129	-.424
210	148	-.301	.070	-.102	-.645
210	149	-.224	.102	.066	-.842
210	150	-.341	.058	-.204	-.515
210	151	-.162	.068	-.050	-.487
210	152	-.265	.089	-.035	-.666
210	153	-.280	.069	-.101	-.569
210	154	-.242	.047	-.129	-.394
210	155	-.170	.027	-.102	-.283
210	156	-.160	.024	-.090	-.258
210	157	-.156	.045	-.054	-.398
210	201	-.230	.092	-.000	-1.033
210	203	-.160	.056	-.013	-.372
210	204	-.256	.071	-.090	-.561
210	205	-.187	.070	.001	-.644
210	206	-.141	.049	.007	-.411
210	209	-.218	.063	-.070	-.548
210	212	-.200	.074	-.038	-.576
210	213	-.175	.070	.020	-.443
210	226	-.044	.050	.143	-.235
210	230	-.053	.040	.095	-.254
210	232	-.103	.064	.114	-.342
210	233	-.083	.052	.269	-.124
210	234	-.038	.037	.074	-.245
210	235	-.218	.077	-.048	-.535
210	236	.044	.047	.253	-.196
210	239	.015	.035	.142	-.199
210	246	.013	.031	.141	-.149
210	251	-.052	.041	.098	-.235
210	252	-.075	.038	.064	-.280
210	253	-.019	.030	.158	-.084
210	255	-.083	.039	-.035	-.248
210	257	-.093	.030	-.027	-.309
220	101	.167	.066	.408	.003
220	102	.171	.071	.401	.004
220	103	.113	.051	.292	-.019
220	104	.176	.068	.387	.013
220	105	.086	.054	.298	-.054
220	106	.144	.058	.343	-.015
220	107	.212	.065	.475	.038
220	108	.123	.058	.308	-.028
220	109	.150	.060	.381	.001
220	110	.074	.044	.237	-.038
220	111	.184	.065	.444	.024
220	112	.128	.054	.307	-.020
220	113	-.111	.026	-.007	-.208
220	114	.170	.061	.388	.013
220	115	.184	.061	.429	.041
220	116	-.010	.053	.176	-.194
220	117	.107	.053	.281	-.017
220	118	.091	.055	.265	-.079
220	119	-.273	.052	-.124	-.461
220	120	-.128	.037	.002	-.275
220	121	-.116	.061	.070	-.327
220	122	.121	.069	.365	-.055
220	123	.096	.049	.305	-.051
220	124	-.392	.082	-.194	-.767
220	125	.114	.066	.340	-.063
220	126	-.030	.069	.166	-.258
220	127	-.069	.035	.043	-.220
220	128	-.122	.043	-.005	-.317
220	129	-.297	.076	-.099	-.594
220	130	-.410	.088	-.197	-.757
220	131	-.393	.079	-.187	-.778
220	132	-.340	.068	-.135	-.660
220	133	-.407	.087	-.193	-.770
220	134	-.197	.049	-.040	-.383
220	135	.066	.050	.279	-.069
220	136	-.430	.106	-.170	-1.061
220	137	-.399	.101	-.157	-.886
220	138	-.443	.098	-.205	-.805
220	139	-.184	.039	-.059	-.322
220	140	-.406	.086	-.216	-.767
220	141	-.423	.108	-.172	-1.005
220	142	-.329	.112	-.033	-.813
220	143	-.222	.084	.031	-.580
220	144	-.375	.072	-.187	-.630
220	145	-.053	.029	.089	-.155
220	146	-.418	.091	-.172	-.838
220	147	-.212	.046	-.091	-.398
220	148	-.319	.070	-.147	-.594
220	149	-.158	.089	.111	-.652
220	150	-.364	.061	-.189	-.551
220	151	-.130	.057	.026	-.402
220	152	-.219	.082	-.002	-.741
220	153	-.262	.052	-.101	-.462
220	154	-.224	.045	-.091	-.390
220	155	-.133	.025	-.057	-.242
220	156	-.145	.024	-.072	-.234
220	157	-.126	.040	-.032	-.357
220	201	-.267	.092	-.070	-.793
220	203	-.194	.062	-.041	-.443
220	204	-.264	.074	-.087	-.636
220	205	-.179	.075	.025	-.627
220	206	-.128	.049	.012	-.423

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
220	209	-.222	.059	-.077	-.479
220	212	-.166	.052	-.028	-.374
220	213	-.111	.054	.051	-.362
220	226	.022	.034	.154	-.112
220	230	.006	.027	.102	-.092
220	232	-.027	.042	.174	-.191
220	233	.149	.057	.384	.001
220	234	-.003	.023	.072	-.104
220	235	-.211	.073	-.006	-.533
220	236	.106	.053	.383	-.062
220	239	-.061	.061	.133	-.314
220	246	.042	.030	.151	-.042
220	251	-.053	.027	.075	-.167
220	252	-.057	.026	.062	-.164
220	253	.034	.033	.182	-.072
220	255	-.105	.055	.030	-.403
220	257	-.109	.048	-.027	-.419
230	101	.112	.056	.352	-.022
230	102	.120	.056	.336	-.010
230	103	.119	.054	.321	-.022
230	104	.131	.059	.330	-.030
230	105	.030	.043	.199	-.077
230	106	.101	.050	.290	-.022
230	107	.194	.063	.517	.025
230	108	.065	.045	.226	-.072
230	109	.170	.065	.438	.003
230	110	.057	.036	.205	-.068
230	111	.170	.061	.386	.019
230	112	.163	.060	.388	.010
230	113	-.125	.022	-.051	-.213
230	114	.124	.054	.335	-.035
230	115	.190	.059	.401	.041
230	116	-.097	.054	.063	-.300
230	117	.147	.058	.365	-.005
230	118	.141	.059	.363	-.028
230	119	-.249	.049	-.104	-.436
230	120	-.072	.037	.041	-.212
230	121	-.232	.077	-.046	-.597
230	122	.125	.064	.366	-.032
230	123	.153	.058	.392	.006
230	124	-.370	.074	-.169	-.652
230	125	.137	.062	.340	-.025
230	126	-.161	.068	.094	-.448
230	127	.005	.037	.151	-.135
230	128	-.036	.040	.100	-.209
230	129	-.167	.068	.022	-.514
230	130	-.291	.082	-.012	-.584
230	131	-.372	.077	-.139	-.711
230	132	-.268	.065	-.037	-.496
230	133	-.403	.084	-.185	-.744

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
230	134	-.079	.048	.080	-.246
230	135	.123	.062	.371	-.029
230	136	-.385	.095	-.164	-.915
230	137	-.353	.077	-.150	-.818
230	138	-.423	.079	-.191	-.704
230	139	-.119	.038	.016	-.278
230	140	-.398	.079	-.200	-.671
230	141	-.403	.095	-.139	-.866
230	142	-.318	.104	-.065	-.895
230	143	-.163	.076	.064	-.504
230	144	-.301	.063	-.140	-.544
230	145	.011	.042	.169	-.097
230	146	-.371	.081	-.154	-.738
230	147	-.164	.042	-.035	-.354
230	148	-.327	.068	-.166	-.592
230	149	-.112	.068	.102	-.474
230	150	-.310	.058	-.160	-.488
230	151	-.099	.045	.053	-.312
230	152	-.185	.061	-.044	-.556
230	153	-.258	.052	-.143	-.471
230	154	-.188	.042	-.081	-.332
230	155	-.088	.025	.005	-.177
230	156	-.123	.022	-.057	-.225
230	157	-.094	.029	.001	-.328
230	201	-.263	.075	-.060	-.696
230	203	-.195	.064	-.046	-.466
230	204	-.319	.113	.032	-.757
230	205	-.190	.064	-.013	-.477
230	206	-.136	.047	-.000	-.322
230	209	-.228	.066	-.070	-.570
230	212	-.163	.053	-.025	-.435
230	213	-.020	.037	.106	-.186
230	226	.029	.030	.152	-.053
230	230	.027	.028	.150	-.056
230	232	-.026	.027	.106	-.112
230	233	.171	.067	.414	-.041
230	234	-.035	.048	.077	-.258
230	235	-.254	.097	-.022	-.624
230	236	.102	.061	.309	-.072
230	239	-.124	.063	.049	-.453
230	246	.031	.032	.176	-.079
230	251	-.052	.020	.049	-.141
230	252	-.030	.033	.181	-.144
230	253	.009	.043	.212	-.155
230	255	-.166	.075	.037	-.508
230	257	-.133	.065	-.018	-.448
240	101	.060	.041	.227	-.050
240	102	.075	.044	.221	-.029
240	103	.112	.051	.270	-.019
240	104	.078	.050	.262	-.060

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
240	105	-.020	.032	.109	-.112
240	106	.040	.037	.182	-.042
240	107	.148	.057	.359	.018
240	108	.005	.037	.123	-.140
240	109	.161	.067	.394	.016
240	110	.024	.029	.133	-.103
240	111	.115	.032	.291	-.008
240	112	.151	.057	.393	.013
240	113	-.127	.021	-.064	-.214
240	114	.036	.047	.174	-.168
240	115	.154	.054	.344	.024
240	116	-.192	.057	-.025	-.405
240	117	.188	.066	.471	.031
240	118	.157	.055	.342	.002
240	119	-.219	.048	-.085	-.394
240	120	-.022	.035	.092	-.142
240	121	-.319	.069	-.128	-.588
240	122	.090	.062	.327	-.088
240	123	.181	.060	.380	.052
240	124	-.300	.060	-.139	-.569
240	125	.077	.062	.274	-.133
240	126	-.261	.067	-.060	-.536
240	127	.060	.043	.222	-.120
240	128	.035	.039	.162	-.143
240	129	-.052	.053	.137	-.280
240	130	-.154	.072	.068	-.425
240	131	-.378	.092	-.122	-.885
240	132	-.205	.068	.056	-.488
240	133	-.362	.079	-.184	-.778
240	134	.005	.049	.197	-.158
240	135	.145	.068	.405	-.022
240	136	-.332	.074	-.130	-.709
240	137	-.306	.071	-.132	-.664
240	138	-.360	.078	-.175	-.666
240	139	-.049	.038	.104	-.175
240	140	-.392	.085	-.177	-.704
240	141	-.392	.084	-.148	-.730
240	142	-.288	.090	-.040	-.693
240	143	-.125	.074	.063	-.563
240	144	-.217	.052	-.072	-.490
240	145	.073	.050	.262	-.097
240	146	-.332	.061	-.166	-.581
240	147	-.099	.035	-.027	-.261
240	148	-.298	.064	-.129	-.520
240	149	-.093	.061	.094	-.459
240	150	-.240	.047	-.138	-.407
240	151	-.080	.040	.086	-.319
240	152	-.153	.046	-.027	-.357
240	153	-.239	.042	-.132	-.414
240	154	-.150	.037	-.056	-.285

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
240	155	-.040	.029	.058	-.151
240	156	-.110	.025	-.049	-.239
240	157	-.085	.026	-.009	-.227
240	201	-.297	.086	-.103	-.705
240	203	-.166	.052	-.034	-.372
240	204	-.226	.137	.070	-.922
240	205	-.181	.087	.104	-.468
240	206	-.136	.045	-.023	-.330
240	209	-.252	.087	-.075	-.720
240	212	-.174	.073	-.008	-.629
240	213	.015	.025	.119	-.073
240	226	-.004	.036	.110	-.157
240	230	-.002	.033	.112	-.118
240	232	-.025	.024	.095	-.125
240	233	.100	.073	.343	-.128
240	234	-.097	.057	.077	-.342
240	235	-.208	.086	.011	-.584
240	236	.022	.068	.340	-.143
240	239	-.155	.072	.059	-.463
240	246	-.001	.037	.177	-.123
240	251	-.044	.020	.035	-.123
240	252	-.019	.039	.200	-.143
240	253	-.023	.048	.198	-.231
240	255	-.208	.080	.025	-.520
240	257	-.155	.076	-.025	-.526
250	101	-.003	.034	.138	-.135
250	102	.008	.033	.165	-.082
250	103	.092	.048	.249	-.039
250	104	-.011	.039	.138	-.175
250	105	-.075	.023	.011	-.169
250	106	-.008	.028	.098	-.095
250	107	.107	.043	.247	-.019
250	108	-.063	.032	.027	-.205
250	109	.135	.059	.336	-.012
250	110	.003	.023	.098	-.071
250	111	.060	.046	.226	-.084
250	112	.129	.054	.309	-.015
250	113	-.126	.023	-.046	-.208
250	114	-.042	.048	.124	-.224
250	115	.104	.049	.272	-.071
250	116	-.242	.057	-.098	-.449
250	117	.215	.070	.465	.031
250	118	.133	.059	.319	-.082
250	119	-.201	.050	-.058	-.408
250	120	-.003	.031	.103	-.145
250	121	-.349	.069	-.184	-.600
250	122	.013	.054	.261	-.159
250	123	.191	.062	.411	.031
250	124	-.278	.061	-.134	-.540
250	125	-.015	.059	.159	-.243

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
250	126	-.320	.060	-.135	-.539
250	127	.114	.052	.325	-.010
250	128	.093	.047	.277	-.024
250	129	.047	.053	.251	-.145
250	130	-.018	.068	.216	-.277
250	131	-.364	.085	-.154	-1.183
250	132	-.219	.088	.091	-.605
250	133	-.298	.059	-.163	-.602
250	134	.072	.052	.277	-.075
250	135	.184	.080	.507	.008
250	136	-.301	.067	-.130	-.602
250	137	-.270	.064	-.062	-.670
250	138	-.284	.068	-.114	-.592
250	139	.019	.045	.161	-.127
250	140	-.321	.075	-.145	-.610
250	141	-.366	.071	-.180	-.615
250	142	-.272	.078	-.010	-.628
250	143	-.100	.061	.076	-.376
250	144	-.130	.046	.009	-.303
250	145	.119	.058	.328	-.034
250	146	-.298	.059	-.153	-.549
250	147	-.037	.036	.080	-.179
250	148	-.267	.062	-.100	-.516
250	149	-.077	.063	.221	-.484
250	150	-.169	.038	-.069	-.312
250	151	-.066	.033	.068	-.265
250	152	-.135	.031	-.052	-.283
250	153	-.204	.038	-.113	-.337
250	154	-.110	.032	-.019	-.226
250	155	-.003	.033	.126	-.105
250	156	-.093	.025	-.009	-.192
250	157	-.074	.025	.031	-.217
250	201	-.336	.113	-.065	-.811
250	203	-.134	.045	-.015	-.403
250	204	-.132	.071	.030	-.593
250	205	-.091	.064	.121	-.466
250	206	-.093	.040	.025	-.266
250	209	-.266	.093	-.056	-.714
250	212	-.185	.083	.022	-.561
250	213	.003	.031	.137	-.151
250	226	-.043	.035	.067	-.252
250	230	-.033	.030	.080	-.146
250	232	-.016	.029	.109	-.172
250	233	-.005	.056	.271	-.139
250	234	-.120	.052	.050	-.361
250	235	-.191	.081	.032	-.563
250	236	-.045	.042	.157	-.169
250	239	-.176	.071	.018	-.626
250	246	-.026	.040	.182	-.179
250	251	-.030	.023	.063	-.113

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
250	252	-.020	.039	.184	-.217
250	253	-.040	.053	.168	-.244
250	255	-.213	.077	.007	-.727
250	257	-.186	.088	-.022	-.578
260	101	-.059	.029	.051	-.237
260	102	-.049	.025	.033	-.148
260	103	.059	.041	.215	-.119
260	104	-.082	.034	.038	-.208
260	105	-.109	.021	-.020	-.187
260	106	-.049	.017	.021	-.113
260	107	.048	.034	.181	-.055
260	108	-.122	.032	-.033	-.243
260	109	.103	.057	.310	-.042
260	110	-.024	.020	.049	-.141
260	111	-.024	.039	.126	-.174
260	112	.078	.050	.287	-.040
260	113	-.143	.031	-.009	-.310
260	114	-.150	.054	-.014	-.379
260	115	.022	.045	.170	-.146
260	116	-.287	.057	-.134	-.509
260	117	.212	.075	.434	.041
260	118	.071	.052	.250	-.130
260	119	-.214	.059	-.026	-.542
260	120	-.039	.050	.107	-.446
260	121	-.331	.064	-.172	-.605
260	122	-.089	.058	.165	-.320
260	123	.167	.061	.370	.020
260	124	-.278	.074	-.092	-.716
260	125	-.144	.063	.042	-.433
260	126	-.336	.064	-.154	-.606
260	127	.160	.056	.376	-.024
260	128	.144	.050	.358	-.010
260	129	.117	.055	.337	-.045
260	130	.074	.064	.274	-.154
260	131	-.313	.071	-.148	-.775
260	132	-.220	.083	.016	-.751
260	133	-.273	.050	-.156	-.557
260	134	.104	.054	.285	-.042
260	135	.200	.082	.539	-.007
260	136	-.295	.058	-.116	-.552
260	137	-.269	.076	-.067	-.734
260	138	-.190	.063	-.014	-.426
260	139	.076	.054	.295	-.065
260	140	-.219	.070	-.036	-.510
260	141	-.324	.056	-.165	-.534
260	142	-.259	.091	.006	-.734
260	143	-.090	.071	.161	-.469
260	144	-.033	.043	.118	-.228
260	145	.163	.067	.406	-.022
260	146	-.282	.053	-.138	-.534

APPENDIX A -- PRESSURE DATA: HELIOS TENSION STRUCTURE -- NO WALL

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
260	147	.027	.041	.179	-.120
260	148	-.205	.052	-.078	-.380
260	149	-.063	.055	.136	-.319
260	150	-.091	.036	.031	-.281
260	151	-.071	.032	.028	-.278
260	152	-.136	.030	-.017	-.257
260	153	-.180	.035	-.094	-.310
260	154	-.061	.030	.040	-.213
260	155	.044	.041	.212	-.085
260	156	-.068	.024	.016	-.164
260	157	-.053	.026	.057	-.164
260	201	-.310	.121	-.043	-.787
260	203	-.156	.080	-.020	-.556
260	204	-.071	.044	.048	-.364
260	205	-.033	.034	.064	-.269
260	206	-.051	.025	.022	-.220
260	209	-.270	.099	-.052	-.706
260	212	-.170	.075	-.003	-.558
260	213	-.007	.031	.126	-.130
260	226	-.055	.028	.063	-.159
260	230	-.042	.024	.040	-.165
260	232	-.025	.029	.097	-.188
260	233	-.037	.032	.166	-.147
260	234	-.117	.048	.050	-.330
260	235	-.197	.089	.023	-.697
260	236	-.059	.031	.077	-.198
260	239	-.200	.071	-.006	-.655
260	246	-.033	.036	.210	-.183
260	251	-.030	.023	.102	-.120
260	252	-.028	.037	.122	-.183
260	253	-.054	.051	.159	-.295
260	255	-.231	.074	.015	-.612
260	257	-.202	.093	-.035	-.826
270	101	-.130	.057	-.007	-.384
270	102	-.099	.024	-.065	-.182
270	103	.026	.036	.182	-.108
270	104	-.143	.035	-.053	-.275
270	105	-.129	.025	-.057	-.254
270	106	-.062	.016	-.015	-.133
270	107	.005	.027	.112	-.086
270	108	-.174	.040	-.067	-.326
270	109	.050	.049	.253	-.088
270	110	-.039	.022	.047	-.151
270	111	-.095	.035	.014	-.232
270	112	.019	.042	.200	-.139
270	113	-.179	.052	-.029	-.398
270	114	-.226	.057	-.091	-.416
270	115	-.058	.043	.077	-.233
270	116	-.287	.055	-.129	-.505
270	117	.182	.073	.440	.023
270	118	-.010	.048	.156	-.180
270	119	-.258	.082	.018	-.654
270	120	-.081	.065	.162	-.390
270	121	-.321	.059	-.172	-.558
270	122	-.207	.064	.002	-.463
270	123	.133	.053	.307	-.003
270	124	-.291	.078	-.090	-.821
270	125	-.253	.072	-.058	-.582
270	126	-.330	.063	-.161	-.632
270	127	.170	.060	.391	.018
270	128	.157	.055	.350	.015
270	129	.138	.059	.351	-.025
270	130	.138	.069	.412	-.100
270	131	-.308	.061	-.163	-.604
270	132	-.214	.076	-.005	-.555
270	133	-.270	.047	-.145	-.450
270	134	.120	.057	.322	-.042
270	135	.209	.085	.518	.016
270	136	-.316	.066	-.160	-.543
270	137	-.260	.071	-.040	-.739
270	138	-.090	.054	.093	-.283
270	139	.121	.059	.367	-.040
270	140	-.125	.059	.034	-.426
270	141	-.325	.061	-.165	-.551
270	142	-.223	.079	.034	-.374
270	143	-.069	.064	.165	-.382
270	144	.035	.048	.214	-.111
270	145	.188	.073	.504	.009
270	146	-.305	.053	-.173	-.548
270	147	.087	.047	.257	-.035
270	148	-.159	.048	-.028	-.333
270	149	-.044	.038	.090	-.255
270	150	-.026	.038	.111	-.160
270	151	-.094	.041	.018	-.304
270	152	-.134	.030	-.042	-.264
270	153	-.150	.032	-.054	-.267
270	154	-.012	.032	.121	-.135
270	155	.084	.048	.252	-.040
270	156	-.034	.025	.084	-.128
270	157	-.029	.029	.097	-.151
270	201	-.142	.098	.005	-.722
270	203	-.176	.099	-.022	-.679
270	204	-.044	.044	.128	-.317
270	205	-.008	.025	.098	-.164
270	206	-.030	.024	.055	-.152
270	209	-.235	.091	-.015	-.739
270	212	-.143	.058	.022	-.510
270	213	-.002	.029	.180	-.118
270	226	-.049	.025	.043	-.161
270	230	-.036	.020	.030	-.140
270	232	-.023	.025	.080	-.132
270	233	-.026	.030	.097	-.120
270	234	-.098	.049	.035	-.314
270	235	-.230	.108	-.008	-.884
270	236	-.047	.027	.070	-.149
270	239	-.201	.067	.023	-.789
270	246	-.025	.035	.129	-.177
270	251	-.029	.025	.094	-.120
270	252	-.029	.036	.167	-.189
270	253	-.054	.047	.123	-.387
270	255	-.233	.076	-.008	-.593
270	257	-.196	.107	-.025	-.710
280	101	-.199	.060	-.048	-.549
280	102	-.111	.023	-.036	-.201
280	103	-.002	.031	.142	-.158
280	104	-.186	.037	-.078	-.317
280	105	-.133	.026	-.062	-.268
280	106	-.066	.018	-.010	-.186
280	107	-.044	.028	.047	-.152
280	108	-.194	.042	-.080	-.376
280	109	-.003	.039	.191	-.147
280	110	-.052	.031	.049	-.350
280	111	-.158	.037	-.046	-.349
280	112	-.052	.036	.071	-.211
280	113	-.209	.070	-.029	-.605
280	114	-.280	.064	-.127	-.549
280	115	-.140	.048	.006	-.358
280	116	-.295	.063	-.110	-.590
280	117	.156	.065	.383	.015
280	118	-.097	.051	.063	-.303
280	119	-.285	.097	.022	-.761
280	120	-.111	.064	.101	-.444
280	121	-.339	.064	-.193	-.638
280	122	-.309	.072	-.130	-.592
280	123	.072	.045	.230	-.049
280	124	-.302	.074	-.049	-.693
280	125	-.369	.078	-.181	-.640
280	126	-.341	.067	-.163	-.665
280	127	.168	.061	.412	.006
280	128	.151	.055	.359	.002
280	129	.131	.059	.333	-.029
280	130	.154	.068	.402	-.029
280	131	-.323	.069	-.180	-.653
280	132	-.246	.094	.053	-.691
280	133	-.286	.051	-.160	-.501
280	134	.099	.053	.273	-.068
280	135	.186	.076	.463	-.004
280	136	-.330	.069	-.153	-.597
280	137	-.280	.063	-.095	-.530
280	138	.004	.056	.249	-.188

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
280	139	.142	.061	.337	.003
280	140	-.038	.049	.132	-.246
280	141	-.355	.066	-.185	-.634
280	142	-.199	.061	-.010	-.464
280	143	-.030	.043	.111	-.287
280	144	.089	.052	.285	-.058
280	145	.193	.074	.430	.009
280	146	-.298	.057	-.161	-.494
280	147	.129	.053	.308	-.012
280	148	-.095	.043	.027	-.269
280	149	-.023	.028	.081	-.155
280	150	.033	.043	.178	-.094
280	151	-.093	.041	.043	-.313
280	152	-.128	.026	-.048	-.224
280	153	-.108	.030	-.012	-.212
280	154	.037	.037	.201	-.079
280	155	.118	.056	.306	-.015
280	156	-.001	.028	.104	-.085
280	157	-.008	.031	.121	-.112
280	201	-.056	.037	.057	-.376
280	203	-.168	.095	.023	-.740
280	204	-.040	.048	.155	-.283
280	205	.004	.032	.193	-.159
280	206	-.015	.024	.122	-.142
280	209	-.189	.077	.028	-.523
280	212	-.121	.065	.052	-.383
280	213	.012	.029	.173	-.103
280	226	-.048	.026	.070	-.163
280	230	-.033	.021	.068	-.116
280	232	-.015	.027	.124	-.125
280	233	-.015	.030	.097	-.113
280	234	-.076	.045	.045	-.276
280	235	-.254	.113	-.018	-.787
280	236	-.035	.028	.072	-.194
280	239	-.171	.065	.011	-.515
280	246	-.015	.034	.154	-.261
280	251	-.028	.026	.056	-.168
280	252	-.021	.033	.104	-.241
280	253	-.042	.050	.152	-.327
280	255	-.233	.080	-.023	-.645
280	257	-.142	.086	-.020	-.676
290	101	-.182	.052	-.053	-.436
290	102	-.121	.024	-.062	-.252
290	103	-.037	.029	.094	-.196
290	104	-.216	.043	-.116	-.369
290	105	-.138	.030	-.057	-.427
290	106	-.073	.022	-.002	-.229
290	107	-.087	.028	.013	-.205
290	108	-.218	.050	-.090	-.400
290	109	-.061	.034	.124	-.183
290	110	-.062	.042	.134	-.292
290	111	-.173	.046	-.068	-.343
290	112	-.126	.036	-.010	-.296
290	113	-.239	.085	.008	-.689
290	114	-.323	.070	-.173	-.608
290	115	-.198	.060	-.064	-.425
290	116	-.324	.073	-.112	-.691
290	117	-.101	.055	.322	-.030
290	118	-.198	.064	-.026	-.403
290	119	-.294	.092	-.056	-.691
290	120	-.136	.071	.047	-.500
290	121	-.341	.076	-.153	-.716
290	122	-.406	.084	-.174	-.763
290	123	.022	.041	.198	-.127
290	124	-.331	.077	-.158	-.867
290	125	-.388	.084	-.176	-.649
290	126	-.368	.078	-.144	-.794
290	127	.145	.058	.379	-.022
290	128	.121	.052	.323	-.035
290	129	.081	.056	.285	-.117
290	130	.129	.070	.351	-.128
290	131	-.365	.091	-.159	-.937
290	132	-.244	.092	.003	-.657
290	133	-.332	.066	-.182	-.717
290	134	.050	.050	.235	-.116
290	135	.154	.069	.370	-.034
290	136	-.362	.072	-.173	-.602
290	137	-.296	.062	-.095	-.585
290	138	.097	.058	.306	-.077
290	139	.144	.065	.366	-.014
290	140	.047	.055	.276	-.126
290	141	-.370	.068	-.197	-.600
290	142	-.183	.045	-.056	-.440
290	143	.004	.031	.112	-.100
290	144	.130	.056	.314	-.018
290	145	.216	.073	.486	-.000
290	146	-.266	.050	-.133	-.431
290	147	.169	.057	.383	.027
290	148	-.019	.043	.151	-.198
290	149	.004	.030	.129	-.112
290	150	.105	.044	.264	-.012
290	151	-.016	.040	.136	-.184
290	152	-.101	.024	-.022	-.181
290	153	-.052	.033	.089	-.155
290	154	.073	.042	.231	-.049
290	155	.134	.060	.338	-.010
290	156	.023	.034	.157	-.070
290	157	.007	.035	.137	-.110
290	201	-.031	.038	.092	-.372
290	203	-.124	.076	.011	-.502
290	204	-.009	.053	.230	-.312
290	205	.021	.037	.171	-.116
290	206	.001	.025	.141	-.082
290	209	-.160	.079	.037	-.604
290	212	-.109	.072	.095	-.505
290	213	.027	.027	.153	-.063
290	226	-.034	.038	.157	-.145
290	230	-.027	.028	.102	-.173
290	232	.013	.033	.215	-.164
290	233	.023	.044	.298	-.127
290	234	-.063	.048	.109	-.273
290	235	-.227	.112	.018	-.877
290	236	-.018	.035	.114	-.156
290	239	-.160	.065	.035	-.472
290	246	.003	.044	.141	-.223
290	251	-.055	.037	.087	-.238
290	252	-.045	.037	.077	-.228
290	253	-.050	.044	.075	-.281
290	255	-.236	.090	-.017	-.592
290	257	-.097	.043	-.013	-.561
300	101	-.152	.047	-.010	-.403
300	102	-.140	.024	-.062	-.241
300	103	-.069	.035	.038	-.271
300	104	-.244	.047	-.131	-.442
300	105	-.153	.038	-.032	-.383
300	106	-.082	.029	.005	-.360
300	107	-.123	.032	-.040	-.257
300	108	-.237	.056	-.090	-.423
300	109	-.118	.031	.001	-.229
300	110	-.085	.049	-.116	-.342
300	111	-.219	.049	-.104	-.390
300	112	-.203	.045	-.073	-.374
300	113	-.260	.095	-.007	-.735
300	114	-.362	.070	-.159	-.612
300	115	-.268	.064	-.120	-.490
300	116	-.382	.081	-.120	-.751
300	117	.043	.045	.236	-.068
300	118	-.293	.070	-.123	-.568
300	119	-.321	.080	-.074	-.666
300	120	-.182	.085	.044	-.560
300	121	-.374	.082	-.155	-.696
300	122	-.495	.095	-.240	-.800
300	123	-.045	.038	.107	-.219
300	124	-.365	.075	-.193	-.762
300	125	-.432	.090	-.219	-.717
300	126	-.394	.092	-.172	-.978
300	127	.095	.050	.284	-.049
300	128	.063	.046	.229	-.083
300	129	-.007	.059	.182	-.260
300	130	.043	.070	.256	-.267

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
300	131	-.407	.096	-.184	-.894
300	132	-.231	.072	-.026	-.592
300	133	-.380	.081	-.173	-.764
300	134	-.030	.047	.129	-.219
300	135	.096	.054	.312	-.048
300	136	-.307	.073	-.085	-.546
300	137	-.318	.071	-.145	-.589
300	138	.153	.062	.379	-.043
300	139	.133	.063	.369	-.032
300	140	.100	.058	.280	-.063
300	141	-.335	.069	-.160	-.565
300	142	-.196	.042	-.074	-.350
300	143	-.020	.034	.094	-.162
300	144	.132	.057	.362	-.029
300	145	.177	.065	.424	.023
300	146	-.191	.051	-.055	-.367
300	147	.166	.061	.387	.004
300	148	.055	.049	.233	-.092
300	149	.005	.035	.127	-.133
300	150	.135	.048	.292	.013
300	151	-.041	.051	.224	-.171
300	152	-.048	.032	.081	-.171
300	153	.019	.043	.185	-.119
300	154	.117	.050	.299	-.021
300	155	.156	.064	.378	-.010
300	156	.062	.046	.248	-.060
300	157	.015	.035	.157	-.100
300	201	-.024	.040	.139	-.216
300	203	-.084	.062	.018	-.418
300	204	.013	.056	.225	-.177
300	205	.033	.039	.183	-.092
300	206	.002	.021	.099	-.077
300	209	-.113	.074	.083	-.439
300	212	-.063	.072	.137	-.432
300	213	.037	.027	.170	-.074
300	226	.024	.059	.274	-.167
300	230	-.002	.038	.136	-.142
300	232	.025	.033	.230	-.102
300	233	.097	.059	.497	-.044
300	234	-.011	.045	.188	-.193
300	235	-.196	.098	.030	-.721
300	236	.032	.041	.198	-.102
300	239	-.164	.072	.042	-.595
300	246	.056	.038	.206	-.109
300	251	-.054	.043	.087	-.288
300	252	-.068	.043	.037	-.290
300	253	-.089	.069	.065	-.513
300	255	-.245	.111	.015	-.731
300	257	-.108	.039	-.006	-.281
310	101	-.126	.038	-.012	-.338
310	102	-.159	.025	-.082	-.240
310	103	-.121	.053	.006	-.422
310	104	-.266	.052	-.112	-.476
310	105	-.171	.056	-.020	-.665
310	106	-.103	.038	.020	-.300
310	107	-.152	.034	-.054	-.290
310	108	-.252	.065	-.070	-.540
310	109	-.165	.032	-.058	-.363
310	110	-.114	.052	.038	-.346
310	111	-.268	.056	-.143	-.476
310	112	-.258	.045	-.125	-.417
310	113	-.245	.082	-.046	-.559
310	114	-.409	.083	-.196	-.716
310	115	-.338	.074	-.170	-.585
310	116	-.438	.101	-.134	-.858
310	117	-.016	.033	.100	-.118
310	118	-.390	.080	-.192	-.647
310	119	-.366	.102	-.104	-.898
310	120	-.229	.094	-.018	-.628
310	121	-.436	.097	-.173	-.815
310	122	-.522	.110	-.251	-.943
310	123	-.126	.043	.017	-.301
310	124	-.441	.093	-.221	-.855
310	125	-.520	.102	-.245	-.886
310	126	-.480	.120	-.187	-1.235
310	127	-.031	.041	.195	-.084
310	128	-.015	.039	.137	-.148
310	129	-.136	.062	.074	-.359
310	130	-.090	.073	.177	-.360
310	131	-.445	.095	-.182	-.894
310	132	-.308	.081	-.057	-.626
310	133	-.445	.103	-.180	-1.058
310	134	-.130	.052	.045	-.310
310	135	-.060	.045	.260	-.104
310	136	-.197	.068	.005	-.455
310	137	-.375	.070	-.191	-.679
310	138	.158	.063	.369	-.003
310	139	.091	.059	.351	-.068
310	140	.128	.062	.345	-.034
310	141	-.240	.064	-.070	-.472
310	142	-.247	.045	-.118	-.428
310	143	-.076	.038	.047	-.202
310	144	.109	.055	.333	-.045
310	145	.138	.052	.302	-.003
310	146	-.103	.049	.050	-.340
310	147	.154	.061	.358	-.003
310	148	.109	.053	.316	-.044
310	149	-.004	.035	.112	-.188
310	150	.160	.052	.323	-.017
310	151	.078	.062	.279	-.302
310	152	.021	.043	.188	-.107
310	153	.099	.052	.287	-.053
310	154	.162	.059	.364	-.012
310	155	.138	.061	.426	-.002
310	156	.110	.056	.310	-.030
310	157	.034	.034	.167	-.071
310	201	-.017	.032	.116	-.128
310	203	-.056	.048	.025	-.431
310	204	.040	.048	.225	-.150
310	205	.051	.036	.227	-.093
310	206	-.000	.022	.143	-.099
310	209	-.054	.061	.118	-.484
310	212	-.014	.055	.164	-.334
310	213	.045	.025	.162	-.032
310	226	.109	.070	.415	-.119
310	230	.069	.044	.259	-.071
310	232	.041	.041	.216	-.150
310	233	.166	.068	.474	-.006
310	234	.060	.037	.189	-.158
310	235	-.172	.080	.013	-.779
310	236	.077	.038	.221	-.042
310	239	-.187	.104	.035	-.710
310	246	.077	.040	.224	-.081
310	251	-.045	.044	.096	-.277
310	252	-.070	.050	.101	-.347
310	253	-.200	.107	.030	-.620
310	255	-.132	.075	-.005	-.729
310	257	-.127	.047	-.020	-.302
320	101	-.103	.025	-.007	-.229
320	102	-.160	.029	-.072	-.296
320	103	-.213	.072	-.060	-.564
320	104	-.266	.058	-.119	-.495
320	105	-.198	.081	.016	-.610
320	106	-.121	.045	-.015	-.339
320	107	-.189	.039	-.095	-.348
320	108	-.250	.075	-.028	-.681
320	109	-.217	.034	-.118	-.378
320	110	-.149	.072	.054	-.512
320	111	-.282	.058	-.146	-.484
320	112	-.314	.052	-.177	-.506
320	113	-.290	.087	-.060	-.632
320	114	-.406	.087	-.199	-.755
320	115	-.353	.078	-.182	-.605
320	116	-.439	.121	-.123	-.994
320	117	-.079	.025	.018	-.159
320	118	-.447	.090	-.230	-.722
320	119	-.402	.131	-.090	-.965
320	120	-.304	.101	-.027	-.687
320	121	-.505	.130	-.206	-1.115
320	122	-.562	.114	-.302	-1.055

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
320	123	-.207	.048	-.096	-.397
320	124	-.523	.134	-.217	-1.262
320	125	-.544	.108	-.269	-1.016
320	126	-.505	.136	-.210	-1.199
320	127	-.038	.036	.093	-.175
320	128	-.097	.040	.018	-.260
320	129	-.266	.074	-.047	-.571
320	130	-.255	.082	.013	-.593
320	131	-.514	.101	-.257	-.944
320	132	-.402	.082	-.162	-.686
320	133	-.459	.097	-.200	-.947
320	134	-.233	.059	-.062	-.519
320	135	.022	.036	.157	-.107
320	136	-.086	.064	.135	-.354
320	137	-.437	.083	-.238	-.728
320	138	.130	.062	.328	-.057
320	139	.042	.050	.241	-.090
320	140	.125	.061	.329	-.052
320	141	-.139	.055	.033	-.341
320	142	-.290	.055	-.150	-.488
320	143	-.142	.041	-.012	-.288
320	144	.046	.048	.230	-.103
320	145	.095	.048	.275	-.051
320	146	-.012	.045	.135	-.204
320	147	.129	.056	.323	-.017
320	148	.148	.061	.361	-.001
320	149	-.025	.039	.119	-.159
320	150	.130	.052	.298	-.007
320	151	.113	.072	.340	-.268
320	152	.080	.060	.335	-.077
320	153	.147	.069	.411	-.011
320	154	.156	.064	.390	-.010
320	155	.115	.053	.338	-.010
320	156	.131	.065	.412	-.032
320	157	.043	.034	.167	-.057
320	201	-.033	.024	.071	-.108
320	203	-.039	.022	.020	-.244
320	204	.081	.045	.261	-.033
320	205	.046	.026	.158	-.054
320	206	-.001	.028	.130	-.130
320	209	-.021	.039	.098	-.263
320	212	.040	.046	.223	-.128
320	213	.069	.030	.190	-.060
320	226	.120	.061	.391	-.090
320	230	.080	.040	.259	-.037
320	232	.023	.053	.284	-.164
320	233	.176	.076	.445	.001
320	234	.088	.035	.196	-.047
320	235	-.164	.068	.025	-.506
320	236	.096	.046	.299	-.032

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
320	239	-.065	.084	.088	-.575
320	246	.055	.046	.248	-.111
320	251	-.041	.047	.141	-.329
320	252	-.064	.050	.081	-.351
320	253	-.232	.113	.046	-.777
320	255	-.103	.046	.012	-.375
320	257	-.109	.050	.004	-.275
330	101	-.091	.030	.000	-.361
330	102	-.168	.047	-.044	-.529
330	103	-.254	.066	-.077	-.499
330	104	-.258	.068	-.083	-.634
330	105	-.219	.097	.073	-.732
330	106	-.136	.062	.028	-.433
330	107	-.208	.042	-.105	-.358
330	108	-.289	.110	-.024	-.868
330	109	-.239	.039	-.127	-.378
330	110	-.172	.093	.083	-.706
330	111	-.299	.061	-.143	-.535
330	112	-.355	.063	-.212	-.559
330	113	-.306	.113	-.009	-1.021
330	114	-.429	.101	-.133	-.840
330	115	-.377	.081	-.184	-.682
330	116	-.483	.150	-.124	-1.155
330	117	-.127	.021	-.040	-.192
330	118	-.461	.094	-.211	-.820
330	119	-.417	.142	-.068	-1.184
330	120	-.417	.109	-.079	-.807
330	121	-.518	.136	-.213	-1.352
330	122	-.533	.115	-.250	-1.004
330	123	-.249	.049	-.115	-.424
330	124	-.526	.151	-.165	-1.486
330	125	-.551	.111	-.248	-.967
330	126	-.542	.138	-.265	-1.545
330	127	-.102	.033	.027	-.221
330	128	-.175	.043	-.063	-.313
330	129	-.388	.084	-.178	-.659
330	130	-.433	.100	-.117	-.857
330	131	-.527	.098	-.287	-.978
330	132	-.482	.095	-.236	-.852
330	133	-.447	.106	-.194	-1.060
330	134	-.336	.070	-.172	-.580
330	135	-.022	.030	.106	-.192
330	136	.014	.066	.220	-.234
330	137	-.448	.082	-.244	-.759
330	138	.049	.061	.258	-.179
330	139	-.025	.042	.146	-.162
330	140	.065	.056	.284	-.126
330	141	-.045	.056	.140	-.248
330	142	-.307	.054	-.158	-.526
330	143	-.194	.042	-.065	-.346

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
330	144	-.032	.049	.147	-.198
330	145	.037	.038	.189	-.077
330	146	.053	.055	.242	-.122
330	147	.083	.047	.284	-.049
330	148	.152	.057	.367	.006
330	149	-.034	.039	.124	-.171
330	150	.095	.048	.273	-.038
330	151	.144	.086	.508	-.236
330	152	.136	.076	.367	-.039
330	153	.178	.078	.403	-.021
330	154	.149	.063	.365	-.012
330	155	.069	.043	.254	-.049
330	156	.150	.071	.387	-.014
330	157	.036	.029	.189	-.057
330	201	-.036	.020	.073	-.125
330	203	-.041	.017	.027	-.133
330	204	.066	.034	.246	-.018
330	205	.051	.029	.196	-.039
330	206	.026	.042	.233	-.110
330	209	-.012	.032	.083	-.159
330	212	.089	.043	.251	-.045
330	213	.085	.043	.305	-.072
330	226	.134	.062	.341	-.050
330	230	.089	.040	.251	-.025
330	232	-.019	.052	.171	-.225
330	233	.193	.080	.511	.023
330	234	.090	.037	.233	-.022
330	235	-.173	.093	.011	-.524
330	236	.088	.042	.269	-.034
330	239	-.009	.036	.097	-.379
330	246	-.014	.049	.142	-.172
330	251	-.035	.061	.143	-.456
330	252	-.058	.051	.103	-.561
330	253	-.175	.092	.070	-.557
330	255	-.079	.039	.024	-.257
330	257	-.097	.047	.030	-.389
340	101	-.115	.060	.065	-.481
340	102	-.203	.080	-.032	-.620
340	103	-.274	.061	-.119	-.579
340	104	-.269	.095	.028	-.740
340	105	-.225	.084	.028	-.661
340	106	-.178	.076	.023	-.714
340	107	-.202	.038	-.109	-.345
340	108	-.310	.119	-.015	-1.051
340	109	-.251	.039	-.147	-.396
340	110	-.207	.096	.074	-.955
340	111	-.286	.058	-.112	-.550
340	112	-.351	.063	-.188	-.538
340	113	-.340	.131	-.031	-1.288
340	114	-.405	.104	-.075	-.883

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
340	115	-.354	.075	-.145	-.705
340	116	-.449	.120	-.134	-1.192
340	117	-.152	.021	-.090	-.226
340	118	-.417	.092	-.150	-.753
340	119	-.418	.126	-.063	-1.037
340	120	-.425	.098	-.094	-.798
340	121	-.486	.125	-.191	-1.050
340	122	-.481	.107	-.196	-.953
340	123	-.280	.053	-.142	-.481
340	124	-.495	.148	-.117	-1.403
340	125	-.475	.121	-.154	-.978
340	126	-.467	.106	-.264	-1.133
340	127	-.159	.034	-.065	-.286
340	128	-.240	.046	-.116	-.388
340	129	-.445	.088	-.238	-.726
340	130	-.510	.100	-.239	-.889
340	131	-.518	.096	-.271	-.943
340	132	-.517	.098	-.260	-.972
340	133	-.398	.103	-.162	-1.054
340	134	-.391	.071	-.225	-.781
340	135	-.058	.029	.040	-.316
340	136	.074	.066	.300	-.104
340	137	-.384	.077	-.197	-.703
340	138	-.055	.061	.143	-.318
340	139	-.098	.037	.063	-.249
340	140	-.012	.061	.200	-.218
340	141	.044	.062	.260	-.164
340	142	-.282	.053	-.139	-.484
340	143	-.224	.044	-.069	-.382
340	144	-.122	.051	.031	-.309
340	145	-.025	.027	.128	-.114
340	146	.099	.060	.281	-.064
340	147	.017	.040	.165	-.107
340	148	.132	.061	.352	-.093
340	149	-.037	.041	.128	-.170
340	150	.031	.041	.188	-.086
340	151	.178	.094	.515	-.094
340	152	.190	.087	.476	-.032
340	153	.197	.082	.434	-.014
340	154	.107	.054	.323	-.042
340	155	.023	.034	.154	-.081
340	156	.141	.068	.408	-.029
340	157	.012	.027	.113	-.082
340	201	-.034	.027	.073	-.159
340	203	-.048	.018	.004	-.114
340	204	.062	.038	.230	-.028
340	205	.052	.036	.175	-.072
340	206	.018	.046	.251	-.156

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
340	209	-.002	.021	.068	-.082
340	212	.073	.036	.198	-.028
340	213	.074	.057	.343	-.147
340	226	.094	.052	.310	-.098
340	230	.043	.039	.192	-.080
340	232	-.010	.062	.234	-.259
340	233	.076	.057	.371	-.100
340	234	.078	.038	.229	-.103
340	235	-.131	.093	.034	-.512
340	236	.032	.039	.198	-.110
340	239	.006	.029	.102	-.196
340	246	-.047	.046	.107	-.244
340	251	-.050	.080	.162	-.633
340	252	-.056	.056	.112	-.572
340	253	-.109	.066	.072	-.477
340	255	-.049	.034	.061	-.198
340	257	-.091	.052	.025	-.416
350	101	-.131	.067	.069	-.429
350	102	-.213	.081	.004	-.611
350	103	-.346	.088	-.157	-.692
350	104	-.289	.121	.005	-1.180
350	105	-.233	.081	.026	-.710
350	106	-.209	.082	.032	-.887
350	107	-.183	.039	-.033	-.337
350	108	-.294	.093	.008	-.815
350	109	-.232	.037	-.104	-.367
350	110	-.256	.096	-.038	-.755
350	111	-.259	.066	-.056	-.589
350	112	-.314	.055	-.103	-.496
350	113	-.331	.114	.025	-.936
350	114	-.373	.122	-.042	-1.273
350	115	-.308	.080	-.033	-.621
350	116	-.391	.096	-.170	-.833
350	117	-.164	.022	-.096	-.233
350	118	-.360	.083	-.127	-.775
350	119	-.391	.112	-.065	-.860
350	120	-.398	.095	-.103	-.838
350	121	-.385	.090	-.198	-.868
350	122	-.384	.096	-.141	-.792
350	123	-.258	.052	-.122	-.461
350	124	-.407	.119	-.116	-.994
350	125	-.389	.103	-.147	-.835
350	126	-.402	.092	-.205	-1.005
350	127	-.196	.042	-.083	-.360
350	128	-.273	.056	-.133	-.490
350	129	-.442	.096	-.195	-.846
350	130	-.490	.107	-.207	-.908
350	131	-.489	.098	-.241	-.995

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
350	132	-.500	.115	-.214	-.970
350	133	-.390	.096	-.145	-.779
350	134	-.384	.078	-.195	-.682
350	135	-.092	.035	.006	-.307
350	136	.107	.062	.327	-.075
350	137	-.314	.064	-.157	-.547
350	138	-.165	.072	.056	-.427
350	139	-.156	.035	-.032	-.295
350	140	-.101	.058	.094	-.318
350	141	.079	.062	.283	-.082
350	142	-.246	.048	-.120	-.457
350	143	-.233	.047	-.099	-.418
350	144	-.207	.057	-.060	-.421
350	145	-.079	.024	.014	-.175
350	146	.123	.064	.371	-.036
350	147	-.046	.033	.070	-.159
350	148	.077	.057	.278	-.106
350	149	-.023	.043	.112	-.199
350	150	-.043	.037	.102	-.170
350	151	.215	.104	.579	-.234
350	152	.226	.096	.517	.003
350	153	.183	.079	.432	-.016
350	154	.051	.049	.230	-.068
350	155	-.016	.027	.088	-.097
350	156	.111	.068	.344	-.084
350	157	-.007	.027	.111	-.127
350	201	-.060	.036	.073	-.230
350	203	-.064	.018	-.003	-.132
350	204	.048	.041	.267	-.055
350	205	.050	.048	.298	-.159
350	206	-.006	.046	.215	-.172
350	209	-.017	.018	.049	-.089
350	212	.069	.038	.224	-.038
350	213	.059	.063	.285	-.146
350	226	.036	.044	.251	-.111
350	230	.006	.038	.135	-.152
350	232	-.023	.069	.281	-.330
350	233	.016	.045	.175	-.139
350	234	.042	.046	.211	-.189
350	235	-.066	.057	.027	-.527
350	236	.003	.034	.126	-.150
350	239	.018	.031	.145	-.159
350	246	-.059	.049	.092	-.245
350	251	-.061	.068	.128	-.576
350	252	-.061	.057	.089	-.477
350	253	-.106	.076	.149	-.559
350	255	-.025	.028	.085	-.177
350	257	-.120	.094	.025	-.671

APPENDIX A -- PRESSURE DATA:

HELIOS TENSION STRUCTURE -- WITH WALL

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
0	101	-.179	.056	-.026	-.499
0	102	-.197	.067	-.012	-.648
0	103	-.391	.138	-.142	-.984
0	104	-.281	.124	.045	-.999
0	105	-.248	.107	.045	-.823
0	106	-.212	.078	-.012	-.693
0	107	-.189	.037	-.013	-.318
0	108	-.326	.097	-.074	-.907
0	109	-.256	.040	-.106	-.402
0	110	-.293	.092	-.073	-.783
0	111	-.295	.072	-.039	-.692
0	112	-.339	.054	-.152	-.529
0	113	-.415	.112	-.067	-1.254
0	114	-.472	.150	-.111	-1.207
0	115	-.369	.090	-.090	-.711
0	116	-.498	.099	-.270	-.911
0	117	-.215	.032	-.122	-.366
0	118	-.483	.099	-.198	-.873
0	119	-.548	.132	-.178	-1.009
0	120	-.557	.113	-.261	-1.008
0	121	-.534	.111	-.303	-1.052
0	122	-.498	.133	-.146	-1.058
0	123	-.330	.058	-.176	-.538
0	124	-.540	.144	-.175	-1.122
0	125	-.526	.128	-.227	-1.250
0	126	-.527	.116	-.253	-1.033
0	127	-.290	.053	-.162	-.520
0	128	-.371	.074	-.193	-.650
0	129	-.596	.128	-.294	-1.043
0	130	-.618	.121	-.307	-1.101
0	131	-.704	.129	-.350	-1.159
0	132	-.662	.116	-.378	-1.149
0	133	-.532	.108	-.234	-1.069
0	134	-.489	.090	-.280	-.748
0	135	-.276	.077	-.050	-.604
0	136	.060	.063	.264	-.140
0	137	-.358	.068	-.183	-.626
0	138	-.338	.081	-.109	-.707
0	139	-.210	.036	-.084	-.373
0	140	-.265	.068	-.043	-.588
0	141	.059	.061	.260	-.127
0	142	-.342	.065	-.155	-.626
0	143	-.350	.059	-.171	-.559
0	144	-.329	.064	-.164	-.549
0	145	-.158	.026	-.080	-.264
0	146	.064	.056	.294	-.113
0	147	-.137	.034	-.039	-.292
0	148	-.038	.054	.155	-.236
0	149	-.117	.041	.057	-.266
0	150	-.175	.042	-.034	-.330
0	151	.079	.131	.566	-.439
0	152	.130	.100	.424	-.346
0	153	.065	.070	.313	-.149
0	154	-.064	.046	.165	-.282
0	155	-.066	.025	.008	-.199
0	156	.008	.080	.247	-.463
0	157	.024	.028	.121	-.103
0	201	.026	.040	.249	-.139
0	203	-.025	.063	.247	-.184
0	204	.143	.052	.483	-.007
0	205	.167	.058	.423	.021
0	206	.110	.051	.317	-.049
0	209	.041	.046	.214	-.115
0	212	.134	.052	.462	-.000
0	213	.194	.062	.496	.052
0	226	.127	.050	.368	-.022
0	230	.119	.043	.334	-.014
0	232	.154	.065	.441	-.122
0	233	.099	.037	.242	-.000
0	234	.144	.050	.363	.019
0	235	.012	.030	.139	-.099
0	236	.102	.037	.244	-.020
0	239	.095	.037	.270	-.043
0	246	.097	.050	.290	-.122
0	251	.017	.099	.254	-.492
0	252	.025	.083	.244	-.417
0	253	.031	.092	.247	-.374
0	255	.055	.026	.163	-.049
0	257	-.037	.079	.108	-.560
10	101	-.168	.055	-.031	-.478
10	102	-.205	.055	-.022	-.451
10	103	-.226	.093	-.090	-.963
10	104	-.262	.099	.000	-.872
10	105	-.223	.117	.084	-.814
10	106	-.218	.087	.026	-.797
10	107	-.164	.041	-.011	-.423
10	108	-.332	.092	-.076	-.909
10	109	-.164	.041	-.028	-.308
10	110	-.264	.092	.024	-.713
10	111	-.288	.095	-.029	-.759
10	112	-.271	.058	-.067	-.468
10	113	-.420	.093	-.105	-.806
10	114	-.464	.137	-.129	-1.217
10	115	-.350	.105	-.043	-.905
10	116	-.482	.109	-.228	-.978
10	117	-.197	.031	-.096	-.327
10	118	-.471	.104	-.138	-.904
10	119	-.555	.128	-.218	-1.098
10	120	-.523	.123	-.179	-.995
10	121	-.487	.099	-.299	-1.031
10	122	-.508	.151	-.158	-1.283
10	123	-.289	.050	-.106	-.471
10	124	-.521	.123	-.218	-1.016
10	125	-.543	.151	-.242	-1.481
10	126	-.463	.107	-.228	-.996
10	127	-.338	.053	-.192	-.538
10	128	-.406	.071	-.179	-.666
10	129	-.545	.110	-.286	-.970
10	130	-.518	.113	-.205	-.938
10	131	-.704	.130	-.325	-1.192
10	132	-.657	.118	-.356	-1.112
10	133	-.544	.106	-.274	-1.057
10	134	-.467	.084	-.244	-.795
10	135	-.282	.083	.090	-.648
10	136	.025	.065	.270	-.211
10	137	-.274	.063	-.100	-.537
10	138	-.440	.099	-.214	-.831
10	139	-.217	.047	-.102	-.384
10	140	-.356	.078	-.160	-.658
10	141	.008	.058	.152	-.156
10	142	-.304	.052	-.163	-.588
10	143	-.338	.049	-.185	-.514
10	144	-.395	.076	-.214	-.659
10	145	-.203	.028	-.118	-.316
10	146	.021	.058	.218	-.179
10	147	-.221	.038	-.078	-.359
10	148	-.147	.048	.047	-.355
10	149	-.112	.042	.062	-.258
10	150	-.270	.052	-.138	-.502
10	151	.081	.127	.520	-.469
10	152	.123	.107	.472	-.338
10	153	-.006	.070	.210	-.313
10	154	-.150	.047	.006	-.426
10	155	-.116	.029	-.032	-.236
10	156	-.019	.092	.208	-.511
10	157	.043	.032	.148	-.179
10	201	.034	.037	.195	-.082
10	203	-.049	.050	.211	-.188
10	204	.147	.044	.346	-.010
10	205	.189	.059	.423	.024
10	206	.106	.054	.360	-.062
10	209	.038	.040	.241	-.070
10	212	.133	.053	.356	.020
10	213	.179	.059	.484	-.064
10	226	.159	.057	.435	-.029
10	230	.161	.052	.413	.005
10	232	.146	.064	.432	-.128
10	233	.104	.040	.244	-.000
10	234	.141	.051	.350	.015
10	235	-.010	.034	.111	-.197

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
10	236	.111	.036	.269	-.012
10	239	.110	.040	.279	-.113
10	246	.101	.050	.289	-.104
10	251	.013	.103	.299	-.492
10	252	.018	.086	.274	-.469
10	253	.049	.085	.294	-.435
10	255	.053	.026	.143	-.037
10	257	-.016	.064	.099	-.405
20	101	-.162	.058	.058	-.561
20	102	-.210	.067	-.057	-.557
20	103	-.136	.034	-.033	-.345
20	104	-.246	.085	-.022	-.644
20	105	-.199	.092	.125	-.747
20	106	-.183	.074	.026	-.588
20	107	-.136	.056	.065	-.495
20	108	-.342	.121	-.012	-.931
20	109	-.107	.043	.058	-.285
20	110	-.231	.107	.071	-.784
20	111	-.277	.116	.000	-.934
20	112	-.228	.067	-.010	-.499
20	113	-.412	.092	-.145	-.753
20	114	-.426	.110	-.105	-.964
20	115	-.329	.128	-.002	-.967
20	116	-.483	.143	-.155	-1.335
20	117	-.180	.028	-.082	-.273
20	118	-.424	.115	-.083	-1.090
20	119	-.531	.113	-.253	-1.004
20	120	-.505	.116	-.155	-.954
20	121	-.494	.121	-.252	-1.184
20	122	-.491	.143	-.191	-1.278
20	123	-.248	.054	-.065	-.496
20	124	-.546	.121	-.201	-1.121
20	125	-.534	.131	-.270	-1.246
20	126	-.436	.118	-.218	-1.178
20	127	-.338	.057	-.192	-.579
20	128	-.396	.074	-.214	-.668
20	129	-.497	.106	-.164	-1.039
20	130	-.453	.120	-.163	-1.109
20	131	-.649	.120	-.291	-.997
20	132	-.614	.103	-.344	-1.005
20	133	-.518	.094	-.300	-.969
20	134	-.442	.082	-.226	-.796
20	135	-.223	.057	-.098	-.579
20	136	-.041	.064	.168	-.266
20	137	-.182	.055	.026	-.398
20	138	-.493	.103	-.220	-.939
20	139	-.239	.048	-.091	-.407
20	140	-.425	.087	-.210	-.781
20	141	-.046	.059	.154	-.236
20	142	-.241	.049	-.053	-.472

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
20	143	-.314	.050	-.146	-.488
20	144	-.456	.082	-.243	-.710
20	145	-.222	.029	-.136	-.324
20	146	-.039	.053	.160	-.199
20	147	-.269	.050	-.120	-.445
20	148	-.242	.057	-.093	-.512
20	149	-.098	.042	.075	-.231
20	150	-.354	.060	-.205	-.607
20	151	.050	.141	.402	-.501
20	152	.096	.104	.420	-.319
20	153	-.085	.059	.111	-.359
20	154	-.234	.052	-.066	-.526
20	155	-.165	.032	-.064	-.354
20	156	-.132	.117	.142	-.637
20	157	.009	.042	.123	-.270
20	201	.030	.039	.188	-.082
20	203	-.044	.034	.083	-.178
20	204	.144	.047	.372	.025
20	205	.184	.060	.517	.043
20	206	.088	.049	.280	-.040
20	208	.035	.032	.169	-.049
20	212	.117	.050	.310	.005
20	213	.172	.056	.437	-.005
20	226	.153	.058	.414	.005
20	230	.168	.056	.418	.012
20	232	.126	.056	.376	-.107
20	233	.104	.036	.252	.002
20	234	.132	.049	.337	.010
20	235	-.034	.031	.076	-.155
20	236	.114	.042	.317	-.027
20	239	.098	.036	.256	-.097
20	246	.115	.048	.312	-.060
20	251	.029	.096	.290	-.454
20	252	.024	.089	.240	-.527
20	253	.080	.078	.316	-.292
20	255	.042	.026	.146	-.052
20	257	-.006	.047	.086	-.336
30	101	-.155	.052	.003	-.387
30	102	-.196	.056	-.045	-.512
30	103	-.095	.032	.032	-.261
30	104	-.229	.099	.000	-.772
30	105	-.171	.077	.102	-.575
30	106	-.163	.062	.006	-.470
30	107	-.121	.073	.135	-1.017
30	108	-.310	.120	-.015	-1.011
30	109	-.075	.051	.119	-.403
30	110	-.187	.089	.066	-.728
30	111	-.247	.106	.030	-.992
30	112	-.208	.092	.081	-.847
30	113	-.350	.090	-.126	-.773

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
30	114	-.424	.106	-.057	-.998
30	115	-.315	.137	.024	-1.238
30	116	-.492	.160	-.134	-1.305
30	117	-.153	.029	-.062	-.253
30	118	-.423	.144	-.068	-1.125
30	119	-.517	.107	-.224	-.933
30	120	-.434	.115	-.097	-.795
30	121	-.512	.128	-.166	-1.214
30	122	-.479	.124	-.197	-1.230
30	123	-.200	.059	.002	-.496
30	124	-.544	.107	-.216	-.956
30	125	-.521	.126	-.278	-1.231
30	126	-.425	.114	-.208	-1.271
30	127	-.311	.057	-.152	-.582
30	128	-.360	.072	-.161	-.655
30	129	-.464	.099	-.161	-.878
30	130	-.395	.107	-.135	-.921
30	131	-.591	.106	-.299	-.992
30	132	-.556	.091	-.271	-.845
30	133	-.468	.078	-.238	-.811
30	134	-.432	.089	-.143	-.827
30	135	-.178	.031	-.076	-.523
30	136	-.143	.065	.086	-.424
30	137	-.108	.058	.108	-.355
30	138	-.511	.107	-.235	-.967
30	139	-.260	.057	-.096	-.486
30	140	-.493	.091	-.266	-.774
30	141	-.119	.053	.053	-.492
30	142	-.174	.045	-.008	-.333
30	143	-.268	.046	-.132	-.496
30	144	-.466	.086	-.262	-.795
30	145	-.226	.032	-.104	-.380
30	146	-.120	.050	.036	-.281
30	147	-.297	.051	-.130	-.549
30	148	-.313	.054	-.178	-.575
30	149	-.081	.039	.071	-.195
30	150	-.397	.066	-.229	-.622
30	151	.019	.126	.326	-.688
30	152	.044	.106	.371	-.455
30	153	-.174	.060	.042	-.513
30	154	-.292	.056	-.154	-.559
30	155	-.217	.036	-.110	-.429
30	156	-.253	.129	.068	-.761
30	157	-.036	.054	.097	-.314
30	201	.027	.038	.227	-.085
30	203	-.024	.029	.102	-.112
30	204	.138	.047	.329	.010
30	205	.179	.058	.427	.038
30	206	.077	.048	.289	-.077
30	209	.038	.032	.181	-.057

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
30	212	.104	.043	.262	.000
30	213	.160	.047	.412	.036
30	226	.147	.053	.436	-.017
30	230	.175	.052	.377	.050
30	232	.102	.045	.284	-.062
30	233	.106	.033	.231	-.003
30	234	.129	.049	.319	-.000
30	235	-.050	.027	.069	-.193
30	236	.115	.040	.279	.005
30	239	.088	.039	.251	-.052
30	246	.122	.045	.274	-.057
30	251	.040	.078	.221	-.505
30	252	.033	.090	.244	-.521
30	253	.106	.063	.341	-.286
30	255	.030	.025	.122	-.082
30	257	-.009	.034	.081	-.235
40	101	-.164	.055	-.007	-.491
40	102	-.172	.042	-.043	-.368
40	103	-.073	.037	.073	-.275
40	104	-.192	.082	.013	-.805
40	105	-.142	.060	.058	-.557
40	106	-.147	.050	-.004	-.436
40	107	-.090	.061	.120	-.672
40	108	-.257	.092	.007	-.950
40	109	-.052	.065	.187	-.456
40	110	-.164	.070	.043	-.565
40	111	-.203	.078	.025	-.613
40	112	-.173	.096	.127	-.859
40	113	-.282	.076	-.085	-.660
40	114	-.402	.122	-.032	-.965
40	115	-.261	.101	.005	-1.030
40	116	-.448	.149	-.117	-1.206
40	117	-.108	.028	-.012	-.283
40	118	-.389	.141	-.083	-1.132
40	119	-.447	.096	-.153	-.809
40	120	-.345	.119	-.066	-.751
40	121	-.470	.129	-.204	-1.176
40	122	-.454	.109	-.218	-.943
40	123	-.164	.077	.115	-.754
40	124	-.490	.112	-.224	-.948
40	125	-.480	.114	-.229	-.981
40	126	-.425	.133	-.193	-1.272
40	127	-.266	.059	-.075	-.463
40	128	-.314	.073	-.107	-.585
40	129	-.451	.107	-.148	-.870
40	130	-.371	.115	-.114	-.956
40	131	-.498	.100	-.232	-.846
40	132	-.445	.095	-.175	-.833
40	133	-.371	.085	-.159	-.818
40	134	-.397	.094	-.092	-.838
40	135	-.142	.027	-.065	-.302
40	136	-.229	.065	-.039	-.547
40	137	-.028	.059	.198	-.214
40	138	-.556	.114	-.249	-1.077
40	139	-.233	.056	-.071	-.423
40	140	-.512	.109	-.271	-.933
40	141	-.211	.060	-.030	-.426
40	142	-.100	.051	.046	-.259
40	143	-.206	.042	-.057	-.366
40	144	-.452	.092	-.210	-.798
40	145	-.214	.034	-.109	-.418
40	146	-.201	.050	-.049	-.419
40	147	-.329	.062	-.150	-.540
40	148	-.402	.074	-.219	-.660
40	149	-.065	.043	.126	-.206
40	150	-.421	.069	-.231	-.680
40	151	.005	.111	.303	-.426
40	152	-.014	.096	.249	-.522
40	153	-.225	.052	-.073	-.606
40	154	-.336	.060	-.158	-.633
40	155	-.243	.042	-.117	-.429
40	156	-.351	.108	-.052	-.750
40	157	-.093	.060	.036	-.358
40	201	.017	.035	.146	-.089
40	203	-.016	.025	.099	-.092
40	204	.124	.045	.306	.020
40	205	.149	.051	.363	.024
40	206	.056	.033	.215	-.057
40	209	.038	.026	.163	-.044
40	212	.092	.036	.235	.008
40	213	.146	.049	.336	.028
40	226	.159	.059	.416	-.046
40	230	.194	.067	.488	.043
40	232	.090	.042	.270	-.055
40	233	.091	.033	.224	.007
40	234	.104	.047	.312	-.003
40	235	-.049	.023	.064	-.159
40	236	.127	.041	.277	.017
40	239	.071	.034	.191	-.080
40	246	.125	.043	.270	-.129
40	251	.047	.052	.203	-.274
40	252	.034	.070	.255	-.396
40	253	.105	.049	.276	-.220
40	255	.016	.025	.119	-.072
40	257	-.017	.027	.064	-.268
50	101	-.187	.059	-.017	-.482
50	102	-.143	.034	-.048	-.323
50	103	-.053	.033	.076	-.205
50	104	-.150	.056	.018	-.425
50	105	-.115	.047	.027	-.376
50	106	-.122	.047	.001	-.393
50	107	-.072	.048	.118	-.374
50	108	-.205	.061	.019	-.545
50	109	-.033	.058	.143	-.386
50	110	-.135	.055	.036	-.418
50	111	-.172	.075	.030	-.808
50	112	-.131	.074	.098	-.552
50	113	-.213	.060	.063	-.582
50	114	-.371	.137	-.001	-1.192
50	115	-.224	.091	.050	-.703
50	116	-.394	.110	.094	-.934
50	117	-.074	.030	.028	-.272
50	118	-.351	.118	-.041	-1.098
50	119	-.370	.092	-.122	-.737
50	120	-.250	.103	-.027	-.674
50	121	-.460	.113	-.179	-1.085
50	122	-.443	.106	-.162	-.990
50	123	-.134	.089	.192	-.677
50	124	-.480	.109	-.178	-.969
50	125	-.461	.106	-.214	-1.040
50	126	-.405	.114	-.180	-1.287
50	127	-.203	.059	.009	-.518
50	128	-.247	.072	.015	-.542
50	129	-.396	.110	-.076	-.840
50	130	-.367	.109	-.108	-.900
50	131	-.343	.088	-.053	-.683
50	132	-.319	.074	-.047	-.623
50	133	-.246	.068	-.041	-.550
50	134	-.355	.095	-.012	-.702
50	135	-.105	.029	.016	-.264
50	136	-.344	.084	-.113	-.745
50	137	.028	.057	.227	-.154
50	138	-.485	.100	-.235	-.939
50	139	-.203	.052	-.058	-.417
50	140	-.484	.114	-.211	-.966
50	141	-.326	.068	-.146	-.599
50	142	-.024	.052	.144	-.178
50	143	-.140	.040	.043	-.298
50	144	-.398	.078	-.190	-.699
50	145	-.182	.034	-.072	-.409
50	146	-.279	.054	-.146	-.494
50	147	-.317	.060	-.151	-.510
50	148	-.423	.079	-.227	-.698
50	149	-.033	.037	.117	-.155
50	150	-.410	.069	-.237	-.636
50	151	-.012	.101	.243	-.384
50	152	-.063	.089	.157	-.477
50	153	-.290	.052	-.160	-.630
50	154	-.355	.062	-.171	-.651
50	155	-.254	.047	-.105	-.507

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
50	156	-.410	.112	-.070	-.905
50	157	-.144	.063	.015	-.408
50	201	.003	.028	.115	-.107
50	203	-.007	.021	.079	-.084
50	204	.111	.043	.310	.025
50	205	.126	.043	.320	.024
50	206	.050	.029	.194	-.047
50	209	.038	.024	.147	-.023
50	212	.081	.033	.231	-.012
50	213	.126	.041	.272	.026
50	226	.153	.057	.450	-.007
50	230	.188	.065	.507	.031
50	232	.080	.034	.229	-.020
50	233	.090	.031	.214	-.003
50	234	.096	.037	.284	-.015
50	235	-.035	.023	.067	-.155
50	236	.132	.049	.341	.005
50	239	.060	.033	.176	-.068
50	246	.126	.041	.321	-.047
50	251	.042	.035	.169	-.191
50	252	.033	.060	.214	-.292
50	253	.108	.043	.279	-.141
50	255	-.001	.023	.080	-.085
50	257	-.028	.024	.064	-.116
60	101	-.203	.053	-.052	-.438
60	102	-.120	.030	-.015	-.269
60	103	-.044	.029	.064	-.171
60	104	-.118	.037	.028	-.321
60	105	-.085	.035	.042	-.269
60	106	-.093	.039	.026	-.438
60	107	-.067	.041	.085	-.257
60	108	-.173	.047	.005	-.386
60	109	-.023	.042	.144	-.226
60	110	-.111	.055	.046	-.450
60	111	-.142	.060	.078	-.449
60	112	-.104	.055	.056	-.394
60	113	-.161	.051	.014	-.380
60	114	-.303	.107	-.033	-.847
60	115	-.194	.087	.022	-.808
60	116	-.328	.082	-.112	-.733
60	117	-.056	.035	.061	-.314
60	118	-.317	.097	-.043	-.733
60	119	-.282	.091	.007	-.612
60	120	-.208	.094	.034	-.719
60	121	-.433	.102	-.195	-.890
60	122	-.380	.142	-.103	-1.022
60	123	-.107	.072	.173	-.592
60	124	-.410	.106	-.133	-.853
60	125	-.460	.117	-.200	-1.096
60	126	-.387	.109	-.155	-1.061
60	127	-.154	.059	.069	-.410
60	128	-.194	.075	.030	-.614
60	129	-.365	.119	-.053	-1.042
60	130	-.381	.129	-.111	-1.045
60	131	-.194	.070	.026	-.465
60	132	-.218	.069	.021	-.455
60	133	-.127	.062	.094	-.368
60	134	-.304	.102	-.002	-.818
60	135	-.076	.033	.041	-.390
60	136	-.406	.087	-.184	-.762
60	137	.064	.056	.230	-.092
60	138	-.457	.100	-.185	-.864
60	139	-.150	.050	.012	-.367
60	140	-.438	.090	-.203	-.838
60	141	-.381	.080	-.190	-.696
60	142	.017	.050	.235	-.126
60	143	-.078	.038	.056	-.207
60	144	-.368	.083	-.110	-.686
60	145	-.135	.030	-.035	-.253
60	146	-.327	.066	-.177	-.582
60	147	-.268	.055	-.099	-.470
60	148	-.409	.076	-.206	-.653
60	149	-.016	.035	.130	-.124
60	150	-.373	.068	-.203	-.597
60	151	-.044	.086	.174	-.470
60	152	-.109	.080	.133	-.531
60	153	-.314	.057	-.163	-.602
60	154	-.346	.063	-.161	-.611
60	155	-.250	.051	-.103	-.486
60	156	-.377	.108	-.090	-.965
60	157	-.160	.056	-.014	-.376
60	201	-.013	.023	.098	-.088
60	203	-.001	.019	.084	-.060
60	204	.084	.030	.225	-.015
60	205	.099	.031	.255	-.002
60	206	.047	.029	.205	-.045
60	209	.037	.020	.119	-.031
60	212	.068	.026	.230	.000
60	213	.090	.035	.242	.002
60	226	.130	.060	.373	-.019
60	230	.165	.066	.446	.008
60	232	.066	.033	.215	-.053
60	233	.081	.032	.239	-.005
60	234	.067	.030	.213	-.020
60	235	-.018	.022	.098	-.096
60	236	.103	.045	.255	-.008
60	239	.053	.029	.186	-.026
60	246	.110	.041	.253	-.028
60	251	.029	.032	.141	-.161
60	252	.039	.044	.180	-.316
60	253	.094	.039	.227	-.122
60	255	-.009	.022	.070	-.080
60	257	-.037	.023	.034	-.195
70	101	-.223	.052	.090	-.437
70	102	-.120	.027	.038	-.278
70	103	-.022	.025	.065	-.141
70	104	-.112	.027	.025	-.298
70	105	-.083	.028	.029	-.266
70	106	-.057	.023	.032	-.251
70	107	-.062	.032	.095	-.229
70	108	-.153	.034	.066	-.305
70	109	-.017	.032	.114	-.198
70	110	-.089	.049	.074	-.515
70	111	-.123	.044	.045	-.302
70	112	-.089	.044	.068	-.333
70	113	-.092	.048	.060	-.336
70	114	-.256	.073	.060	-.558
70	115	-.159	.070	.027	-.457
70	116	-.290	.065	.074	-.564
70	117	-.045	.032	.068	-.220
70	118	-.287	.100	.061	-.756
70	119	-.173	.080	.044	-.547
70	120	-.156	.072	.041	-.526
70	121	-.400	.088	.165	-.785
70	122	-.377	.121	.079	-.968
70	123	-.086	.055	.141	-.367
70	124	-.283	.101	.085	-.709
70	125	-.472	.115	.132	-1.013
70	126	-.385	.095	.160	-.892
70	127	-.120	.063	.097	-.498
70	128	-.154	.074	.029	-.557
70	129	-.358	.125	.039	-1.050
70	130	-.389	.118	.138	-1.025
70	131	-.067	.055	.107	-.268
70	132	-.150	.075	.133	-.519
70	133	.009	.061	.287	-.226
70	134	-.233	.096	.018	-.884
70	135	-.035	.035	.101	-.292
70	136	-.400	.086	.167	-.881
70	137	.068	.048	.254	-.055
70	138	-.409	.087	.158	-.787
70	139	-.094	.040	.044	-.274
70	140	-.368	.095	.102	-.712
70	141	-.439	.086	.227	-.786
70	142	.042	.045	.189	-.103
70	143	-.033	.037	.092	-.138
70	144	-.278	.077	.065	-.559
70	145	-.097	.028	.005	-.255
70	146	-.344	.066	.177	-.554
70	147	-.215	.053	.063	-.416

APPENDIX A -- PRESSURE DATA: HELIOS TENSION STRUCTURE - WITH WALL

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
70	148	-.391	.084	-.171	-.669
70	149	-.008	.032	.109	-.119
70	150	-.284	.056	-.135	-.495
70	151	-.059	.064	.119	-.312
70	152	-.150	.067	.017	-.422
70	153	-.308	.060	-.160	-.613
70	154	-.297	.060	-.114	-.560
70	155	-.201	.046	-.078	-.400
70	156	-.361	.101	-.075	-.877
70	157	-.141	.054	.003	-.375
70	201	-.017	.020	.064	-.096
70	203	.008	.016	.067	-.051
70	204	.069	.025	.170	-.012
70	205	.083	.027	.179	.005
70	206	.042	.025	.142	-.049
70	209	.030	.019	.119	-.019
70	212	.055	.024	.150	-.019
70	213	.070	.029	.181	-.035
70	226	.097	.051	.300	-.032
70	230	.124	.052	.340	.000
70	232	.056	.029	.214	-.039
70	233	.059	.025	.205	-.013
70	234	.071	.029	.189	.002
70	235	-.003	.023	.108	-.065
70	236	.082	.037	.231	-.012
70	239	.054	.028	.193	-.026
70	246	.105	.039	.263	.000
70	251	.023	.034	.158	-.146
70	252	.048	.034	.172	-.098
70	253	.085	.039	.224	-.080
70	255	.006	.022	.103	-.076
70	257	-.044	.023	.027	-.164
80	101	-.224	.043	-.095	-.397
80	102	-.134	.026	-.060	-.262
80	103	-.039	.030	.055	-.198
80	104	-.135	.025	-.060	-.246
80	105	-.099	.023	-.019	-.212
80	106	-.050	.017	.014	-.128
80	107	-.089	.034	.031	-.238
80	108	-.176	.036	-.053	-.338
80	109	-.034	.026	.088	-.171
80	110	-.073	.033	.053	-.303
80	111	-.133	.033	.000	-.271
80	112	-.086	.031	.023	-.241
80	113	-.047	.041	.106	-.267
80	114	-.248	.054	-.097	-.469
80	115	-.139	.041	.012	-.363
80	116	-.278	.056	-.100	-.551
80	117	-.042	.022	.043	-.158
80	118	-.237	.080	-.065	-.747
80	119	-.073	.065	.134	-.375
80	120	-.125	.075	.081	-.501
80	121	-.353	.072	.148	-.675
80	122	-.297	.090	-.042	-.728
80	123	-.071	.079	.071	-.258
80	124	-.142	.095	.204	-.534
80	125	-.398	.093	-.115	-.843
80	126	-.368	.090	-.118	-.759
80	127	-.097	.047	.059	-.336
80	128	-.116	.054	.037	-.469
80	129	-.264	.090	-.027	-.751
80	130	-.348	.098	-.136	-.879
80	131	-.018	.051	.167	-.333
80	132	-.148	.090	.124	-.517
80	133	-.079	.057	.310	-.223
80	134	-.180	.064	.008	-.709
80	135	-.015	.028	.099	-.247
80	136	-.392	.090	-.158	-.801
80	137	-.053	.052	.233	-.225
80	138	-.350	.092	-.131	-.757
80	139	-.069	.035	.052	-.412
80	140	-.311	.083	.094	-.672
80	141	-.456	.086	-.227	-.787
80	142	-.046	.044	.203	-.120
80	143	-.036	.037	.102	-.238
80	144	-.207	.059	-.046	-.471
80	145	-.081	.027	.023	-.243
80	146	-.333	.064	-.160	-.547
80	147	-.147	.038	-.026	-.294
80	148	-.315	.067	-.141	-.581
80	149	-.010	.031	.098	-.148
80	150	-.221	.045	-.093	-.389
80	151	-.060	.048	.074	-.298
80	152	-.182	.050	-.043	-.425
80	153	-.278	.054	-.125	-.525
80	154	-.263	.061	-.087	-.534
80	155	-.158	.039	-.016	-.357
80	156	-.264	.076	-.083	-.593
80	157	-.105	.044	.013	-.432
80	201	-.038	.019	.032	-.109
80	203	.003	.015	.060	-.059
80	204	.049	.024	.153	-.022
80	205	.054	.022	.163	-.047
80	206	.011	.022	.101	-.079
80	209	.019	.019	.115	-.040
80	212	.037	.022	.141	-.064
80	213	.038	.023	.141	-.064
80	226	.058	.040	.259	-.061
80	230	.080	.040	.258	-.016
80	232	.031	.029	.155	-.086
80	233	.045	.023	.134	-.030
80	234	.050	.026	.170	-.025
80	235	-.003	.019	.103	-.063
80	236	.054	.030	.163	-.037
80	239	.032	.026	.151	-.055
80	246	.069	.032	.227	-.037
80	251	.014	.031	.141	-.109
80	252	.031	.032	.158	-.141
80	253	.072	.040	.268	-.070
80	255	.009	.022	.106	-.076
80	257	-.046	.021	.024	-.160
90	101	-.180	.040	-.026	-.331
90	102	-.137	.025	-.078	-.277
90	103	-.110	.033	-.001	-.286
90	104	-.171	.028	-.100	-.317
90	105	-.105	.022	-.039	-.211
90	106	-.045	.015	.007	-.098
90	107	-.139	.033	-.016	-.277
90	108	-.200	.026	.114	-.343
90	109	-.065	.025	.044	-.157
90	110	-.046	.023	.029	-.182
90	111	-.170	.036	-.060	-.317
90	112	-.098	.027	-.005	-.244
90	113	-.015	.029	.079	-.192
90	114	-.291	.069	-.119	-.517
90	115	-.151	.041	-.019	-.341
90	116	-.326	.073	-.128	-.630
90	117	-.046	.020	.031	-.146
90	118	-.191	.047	-.033	-.447
90	119	-.005	.038	.204	-.299
90	120	-.110	.080	.130	-.494
90	121	-.393	.078	-.215	-.695
90	122	-.272	.064	-.098	-.551
90	123	-.064	.034	.051	-.208
90	124	-.003	.088	.315	-.327
90	125	-.364	.078	-.145	-.762
90	126	-.378	.084	-.166	-.706
90	127	-.080	.035	.039	-.259
90	128	-.087	.036	.029	-.314
90	129	-.198	.061	-.057	-.523
90	130	-.319	.089	-.154	-.777
90	131	-.032	.052	.209	-.246
90	132	-.162	.067	.086	-.399
90	133	-.124	.061	.313	-.180
90	134	-.335	.045	.008	-.336
90	135	-.118	.028	.093	-.100
90	136	-.368	.068	-.110	-.861
90	137	-.118	.028	.253	-.295
90	138	-.306	.079	-.097	-.739
90	139	-.050	.032	.047	-.238

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
90	140	-.268	.068	-.080	-.572
90	141	-.399	.076	-.191	-.690
90	142	-.001	.054	.168	-.256
90	143	-.085	.069	.150	-.494
90	144	-.161	.047	-.027	-.424
90	145	-.070	.025	.013	-.485
90	146	-.330	.062	-.170	-.523
90	147	-.111	.030	-.018	-.266
90	148	-.263	.053	-.083	-.459
90	149	-.029	.040	.146	-.262
90	150	-.171	.036	-.060	-.352
90	151	-.039	.041	.088	-.226
90	152	-.152	.044	-.058	-.436
90	153	-.227	.051	-.086	-.564
90	154	-.197	.050	-.016	-.485
90	155	-.114	.034	-.016	-.277
90	156	-.210	.059	-.044	-.505
90	157	-.084	.032	.010	-.358
90	201	-.051	.018	.007	-.125
90	203	-.012	.016	.039	-.068
90	204	.025	.025	.143	-.054
90	205	.018	.027	.130	-.088
90	206	-.013	.022	.091	-.132
90	209	.005	.020	.091	-.055
90	212	.025	.024	.153	-.061
90	213	.012	.020	.084	-.065
90	226	.027	.030	.205	-.064
90	230	.048	.033	.196	-.050
90	232	.001	.021	.093	-.100
90	233	.018	.019	.105	-.046
90	234	.030	.021	.113	-.049
90	235	-.008	.017	.058	-.072
90	236	.032	.028	.147	-.061
90	239	.005	.020	.086	-.074
90	246	.043	.027	.157	-.042
90	251	-.002	.029	.126	-.117
90	252	.004	.029	.142	-.115
90	253	.040	.038	.298	-.086
90	255	-.002	.021	.108	-.083
90	257	-.035	.018	.031	-.124
100	101	-.100	.037	-.011	-.259
100	102	-.126	.020	-.060	-.225
100	103	-.125	.034	-.016	-.299
100	104	-.181	.031	-.105	-.288
100	105	-.084	.023	-.007	-.164
100	106	-.036	.015	.029	-.089
100	107	-.184	.035	-.081	-.360
100	108	-.209	.039	-.117	-.340
100	109	-.113	.029	.022	-.250
100	110	-.027	.019	.048	-.101

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
100	111	-.235	.044	-.096	-.400
100	112	-.138	.039	-.027	-.283
100	113	-.025	.025	.120	-.093
100	114	-.343	.073	-.130	-.614
100	115	-.220	.057	-.056	-.446
100	116	-.361	.077	-.184	-.662
100	117	-.070	.024	-.005	-.275
100	118	-.246	.067	-.068	-.532
100	119	-.053	.043	.183	-.127
100	120	-.047	.046	.119	-.416
100	121	-.474	.095	-.253	-.823
100	122	-.318	.076	-.111	-.778
100	123	-.102	.048	.054	-.421
100	124	.108	.065	.307	-.219
100	125	-.397	.085	-.190	-.727
100	126	-.387	.081	-.200	-.737
100	127	-.097	.045	.064	-.320
100	128	-.113	.047	.025	-.401
100	129	-.248	.072	-.072	-.538
100	130	-.317	.074	-.145	-.675
100	131	-.011	.054	.243	-.210
100	132	-.130	.072	.065	-.425
100	133	.087	.061	.352	-.134
100	134	-.182	.063	.024	-.584
100	135	-.011	.031	.108	-.316
100	136	-.334	.078	-.104	-.621
100	137	-.131	.091	.161	-.537
100	138	-.362	.096	-.100	-.870
100	139	-.066	.035	.072	-.233
100	140	-.285	.082	-.055	-.738
100	141	-.345	.066	-.169	-.818
100	142	-.051	.059	.249	-.285
100	143	-.118	.068	.086	-.409
100	144	-.202	.070	-.025	-.802
100	145	-.071	.026	.066	-.256
100	146	-.257	.047	-.136	-.466
100	147	-.103	.032	.052	-.265
100	148	-.228	.048	-.071	-.406
100	149	-.062	.065	.236	-.449
100	150	-.167	.034	-.060	-.392
100	151	-.017	.029	.071	-.173
100	152	-.108	.032	-.028	-.292
100	153	-.156	.040	-.050	-.357
100	154	-.152	.038	-.033	-.365
100	155	-.072	.026	.022	-.204
100	156	-.182	.050	-.007	-.424
100	157	-.082	.023	-.009	-.181
100	201	-.076	.027	-.002	-.289
100	203	-.039	.016	.013	-.132
100	204	-.016	.026	.104	-.135

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
100	205	-.030	.029	.065	-.161
100	206	-.055	.028	.040	-.200
100	209	-.028	.021	.060	-.114
100	212	-.001	.026	.133	-.078
100	213	-.008	.019	.063	-.082
100	226	.007	.027	.131	-.088
100	230	.030	.037	.203	-.078
100	232	-.015	.023	.099	-.131
100	233	.008	.018	.079	-.049
100	234	.009	.020	.109	-.057
100	235	-.014	.018	.072	-.085
100	236	.015	.032	.185	-.084
100	239	-.018	.017	.062	-.197
100	246	.027	.025	.153	-.042
100	251	-.002	.028	.143	-.120
100	252	-.016	.024	.089	-.133
100	253	.013	.028	.151	-.077
100	255	-.016	.018	.082	-.072
100	257	-.040	.017	.029	-.109
110	101	-.073	.034	.012	-.267
110	102	-.109	.019	-.038	-.222
110	103	-.127	.040	-.011	-.313
110	104	-.192	.030	-.110	-.307
110	105	-.047	.023	.057	-.133
110	106	-.008	.020	.064	-.078
110	107	-.220	.042	-.110	-.395
110	108	-.200	.035	-.105	-.366
110	109	-.151	.031	-.039	-.295
110	110	-.006	.023	.107	-.089
110	111	-.276	.045	-.156	-.448
110	112	-.208	.050	-.015	-.462
110	113	.058	.028	.156	-.030
110	114	-.374	.073	-.179	-.668
110	115	-.278	.060	-.110	-.540
110	116	-.335	.072	-.162	-.591
110	117	-.087	.025	.003	-.272
110	118	-.317	.071	-.115	-.563
110	119	.068	.040	.200	-.061
110	120	-.027	.031	.100	-.166
110	121	-.420	.092	-.242	-.763
110	122	-.363	.082	-.117	-.735
110	123	-.148	.059	.034	-.450
110	124	.104	.056	.336	-.039
110	125	-.407	.089	-.184	-.728
110	126	-.392	.083	-.192	-.697
110	127	-.130	.066	.099	-.498
110	128	-.169	.071	.017	-.514
110	129	-.311	.085	-.100	-.797
110	130	-.341	.080	-.172	-.782
110	131	-.040	.055	.147	-.254

APPENDIX A -- PRESSURE DATA: HELIOS TENSION STRUCTURE -- WITH WALL

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
110	132	-.142	.062	.047	-.394
110	133	.040	.062	.299	-.197
110	134	-.247	.079	-.021	-.618
110	135	-.021	.034	.106	-.392
110	136	-.350	.079	-.135	-.770
110	137	-.274	.093	.004	-.623
110	138	-.376	.103	-.122	-.909
110	139	-.099	.049	.086	-.334
110	140	-.329	.103	-.093	-1.043
110	141	-.356	.069	-.171	-.643
110	142	-.127	.064	.096	-.371
110	143	-.151	.071	.047	-.460
110	144	-.262	.088	-.048	-.687
110	145	-.082	.034	.068	-.329
110	146	-.257	.050	-.098	-.459
110	147	-.116	.047	.061	-.329
110	148	-.237	.065	-.058	-.531
110	149	-.085	.059	.161	-.374
110	150	-.206	.059	-.048	-.514
110	151	-.018	.033	.175	-.197
110	152	-.093	.027	.027	-.292
110	153	-.116	.034	.001	-.299
110	154	-.139	.041	.034	-.375
110	155	-.060	.027	.044	-.185
110	156	-.113	.043	.025	-.292
110	157	-.063	.023	.020	-.150
110	201	-.088	.033	-.002	-.281
110	203	-.055	.017	.006	-.144
110	204	-.060	.035	.136	-.340
110	205	-.077	.041	.041	-.394
110	206	-.084	.032	.022	-.237
110	209	-.061	.023	.027	-.191
110	212	-.037	.025	.084	-.150
110	213	-.043	.023	.034	-.149
110	226	-.014	.030	.161	-.108
110	230	.010	.040	.234	-.093
110	232	-.036	.028	.090	-.164
110	233	-.015	.021	.073	-.074
110	234	-.021	.018	.046	-.110
110	235	-.029	.017	.029	-.100
110	236	.003	.031	.142	-.095
110	239	-.039	.017	.024	-.119
110	246	.016	.027	.164	-.063
110	251	-.007	.028	.148	-.109
110	252	-.028	.022	.076	-.115
110	253	.002	.022	.113	-.081
110	255	-.027	.016	.034	-.078
110	257	-.045	.016	.022	-.110
120	101	-.066	.037	.057	-.252
120	102	-.095	.020	-.007	-.189
120	103	-.136	.046	-.016	-.378
120	104	-.188	.029	-.102	-.304
120	105	-.031	.028	.090	-.167
120	106	.027	.029	.133	-.048
120	107	-.243	.046	-.108	-.467
120	108	-.186	.035	-.065	-.305
120	109	-.197	.041	-.075	-.397
120	110	.009	.029	.119	-.098
120	111	-.297	.048	-.177	-.504
120	112	-.263	.051	-.115	-.490
120	113	.069	.035	.214	-.027
120	114	-.377	.067	-.205	-.626
120	115	-.310	.059	-.152	-.561
120	116	-.279	.061	-.129	-.544
120	117	-.123	.026	-.042	-.241
120	118	-.344	.074	-.152	-.694
120	119	.046	.046	.217	-.100
120	120	-.070	.035	.055	-.207
120	121	-.389	.079	-.210	-.687
120	122	-.355	.081	-.167	-.677
120	123	-.205	.068	.020	-.509
120	124	.097	.058	.290	-.077
120	125	-.391	.086	-.205	-.819
120	126	-.331	.065	-.135	-.616
120	127	-.161	.078	.107	-.757
120	128	-.218	.082	.065	-.599
120	129	-.339	.092	-.111	-1.050
120	130	-.326	.066	-.167	-.709
120	131	-.165	.063	.054	-.421
120	132	-.193	.051	-.023	-.390
120	133	-.086	.065	.123	-.331
120	134	-.299	.087	-.003	-.853
120	135	-.042	.035	.111	-.371
120	136	-.348	.064	-.179	-.727
120	137	-.375	.080	-.148	-.661
120	138	-.353	.081	-.170	-.989
120	139	-.124	.062	.063	-.397
120	140	-.344	.098	-.106	-.843
120	141	-.371	.068	-.178	-.638
120	142	-.233	.073	.027	-.525
120	143	-.203	.081	.022	-.632
120	144	-.281	.076	-.087	-.728
120	145	-.101	.046	.046	-.456
120	146	-.299	.059	-.119	-.589
120	147	-.141	.061	.072	-.444
120	148	-.290	.088	-.062	-.732
120	149	-.122	.061	.082	-.394
120	150	-.238	.070	-.068	-.570
120	151	-.046	.039	.104	-.247
120	152	-.105	.032	-.006	-.375
120	153	-.132	.043	.004	-.309
120	154	-.153	.056	.079	-.517
120	155	-.072	.034	.092	-.265
120	156	-.108	.044	.083	-.282
120	157	-.072	.024	.040	-.179
120	201	-.109	.041	-.012	-.332
120	203	-.071	.022	-.011	-.199
120	204	-.101	.031	.002	-.320
120	205	-.114	.035	.007	-.280
120	206	-.129	.043	-.017	-.335
120	209	-.088	.021	-.007	-.221
120	212	-.087	.023	.062	-.233
120	213	-.067	.023	.001	-.178
120	226	-.063	.025	.067	-.148
120	230	-.040	.030	.132	-.118
120	232	-.074	.025	.044	-.185
120	233	-.050	.019	.010	-.112
120	234	-.054	.019	.022	-.116
120	235	-.049	.019	.039	-.107
120	236	-.047	.028	.071	-.133
120	239	-.063	.016	.009	-.144
120	246	-.029	.026	.153	-.116
120	251	-.037	.028	.064	-.166
120	252	-.059	.025	.020	-.175
120	253	-.022	.022	.086	-.109
120	255	-.048	.017	.010	-.108
120	257	-.058	.015	.005	-.118
130	101	-.049	.044	.108	-.276
130	102	-.068	.025	.063	-.141
130	103	-.153	.050	-.011	-.440
130	104	-.157	.029	-.075	-.282
130	105	.000	.040	.181	-.128
130	106	.058	.040	.209	-.046
130	107	-.241	.045	-.094	-.429
130	108	-.149	.032	-.042	-.269
130	109	-.219	.044	-.068	-.360
130	110	.021	.033	.136	-.071
130	111	-.288	.051	-.175	-.499
130	112	-.281	.053	-.141	-.467
130	113	.069	.039	.206	-.044
130	114	-.348	.071	-.203	-.666
130	115	-.309	.064	-.151	-.578
130	116	-.213	.056	-.074	-.494
130	117	-.152	.029	-.032	-.275
130	118	-.343	.070	-.160	-.637
130	119	.000	.051	.190	-.160
130	120	-.122	.037	.031	-.267
130	121	-.280	.067	-.110	-.529
130	122	-.337	.081	-.170	-.641
130	123	-.224	.062	-.027	-.471

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
130	124	-.030	.058	-.244	-.155
130	125	-.378	.085	-.200	-.777
130	126	-.265	.070	-.067	-.513
130	127	-.185	.078	.064	-.859
130	128	-.235	.085	.012	-.689
130	129	-.324	.088	-.041	-.852
130	130	-.328	.075	-.153	-.812
130	131	-.284	.062	-.100	-.534
130	132	-.270	.058	-.064	-.472
130	133	-.195	.068	.051	-.417
130	134	-.306	.088	-.016	-.861
130	135	-.067	.041	.075	-.264
130	136	-.336	.066	-.152	-.745
130	137	-.387	.077	-.181	-.715
130	138	-.342	.070	-.187	-.704
130	139	-.159	.083	.081	-.644
130	140	-.352	.089	-.156	-.845
130	141	-.363	.066	-.171	-.826
130	142	-.303	.074	-.075	-.652
130	143	-.243	.087	-.022	-.614
130	144	-.285	.070	-.050	-.566
130	145	-.129	.052	.038	-.556
130	146	-.340	.071	-.124	-.707
130	147	-.150	.060	.029	-.483
130	148	-.307	.084	-.081	-.699
130	149	-.165	.077	.050	-.615
130	150	-.238	.063	-.057	-.511
130	151	-.079	.043	.080	-.326
130	152	-.151	.042	-.028	-.351
130	153	-.168	.059	-.001	-.491
130	154	-.160	.056	.024	-.397
130	155	-.101	.046	.072	-.455
130	156	-.115	.045	.111	-.322
130	157	-.091	.027	.028	-.214
130	201	-.136	.045	-.034	-.402
130	203	-.090	.026	-.022	-.210
130	204	-.129	.028	-.038	-.377
130	205	-.140	.036	-.007	-.466
130	206	-.139	.042	-.015	-.350
130	209	-.113	.030	-.012	-.273
130	212	-.118	.021	-.043	-.199
130	213	-.097	.023	-.020	-.168
130	226	-.104	.024	.025	-.181
130	230	-.092	.026	.063	-.169
130	232	-.117	.027	-.022	-.241
130	233	-.091	.021	-.022	-.165
130	234	-.096	.020	-.022	-.170
130	235	-.076	.021	-.008	-.163
130	236	-.099	.023	-.007	-.200
130	239	-.097	.018	-.031	-.184

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
130	246	-.080	.021	.012	-.160
130	251	-.069	.028	.031	-.205
130	252	-.102	.032	-.010	-.246
130	253	-.065	.025	.015	-.156
130	255	-.078	.018	-.027	-.145
130	257	-.078	.020	-.012	-.205
140	101	-.022	.047	.173	-.233
140	102	-.034	.031	.070	-.185
140	103	-.154	.049	-.020	-.398
140	104	-.128	.029	-.019	-.226
140	105	.030	.046	.248	-.092
140	106	.088	.049	.297	-.034
140	107	-.236	.046	-.048	-.448
140	108	-.096	.034	.025	-.221
140	109	-.231	.048	-.080	-.401
140	110	.033	.040	.191	-.093
140	111	-.287	.048	-.148	-.447
140	112	-.294	.053	-.127	-.493
140	113	.067	.041	.224	-.058
140	114	-.333	.065	-.166	-.604
140	115	-.329	.063	-.173	-.568
140	116	-.155	.051	-.001	-.386
140	117	-.171	.030	-.077	-.284
140	118	-.344	.078	-.159	-.716
140	119	-.038	.052	.135	-.216
140	120	-.168	.042	-.041	-.407
140	121	-.205	.057	-.035	-.437
140	122	-.352	.085	-.162	-.748
140	123	-.255	.060	-.071	-.497
140	124	-.029	.063	.177	-.243
140	125	-.367	.088	-.181	-.800
140	126	-.171	.063	.026	-.443
140	127	-.212	.073	.016	-.744
140	128	-.248	.083	.061	-.723
140	129	-.309	.089	-.074	-.743
140	130	-.305	.076	-.143	-.739
140	131	-.377	.069	-.105	-.621
140	132	-.329	.065	-.142	-.594
140	133	-.270	.064	-.096	-.566
140	134	-.300	.081	-.028	-.589
140	135	-.087	.047	.075	-.345
140	136	-.333	.061	-.192	-.702
140	137	-.365	.079	-.152	-.715
140	138	-.317	.074	-.161	-.670
140	139	-.200	.096	.050	-.902
140	140	-.340	.075	-.159	-.811
140	141	-.368	.079	-.165	-.776
140	142	-.344	.083	-.102	-.655
140	143	-.272	.091	-.005	-.624
140	144	-.287	.085	-.029	-.683

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
140	145	-.150	.043	.005	-.463
140	146	-.351	.072	-.157	-.705
140	147	-.201	.086	.086	-.788
140	148	-.310	.077	-.073	-.716
140	149	-.213	.101	.043	-.779
140	150	-.252	.066	-.058	-.566
140	151	-.131	.066	.034	-.528
140	152	-.183	.051	-.031	-.422
140	153	-.171	.059	.023	-.474
140	154	-.192	.064	.021	-.584
140	155	-.131	.061	.055	-.505
140	156	-.136	.046	.045	-.325
140	157	-.116	.036	.003	-.290
140	201	-.167	.050	-.042	-.425
140	203	-.104	.029	-.029	-.305
140	204	-.153	.032	-.046	-.340
140	205	-.160	.038	-.060	-.489
140	206	-.171	.054	-.029	-.502
140	209	-.142	.040	.012	-.398
140	212	-.145	.028	-.063	-.316
140	213	-.115	.022	-.043	-.198
140	226	-.137	.022	-.071	-.258
140	230	-.133	.023	-.034	-.223
140	232	-.131	.026	-.052	-.236
140	233	-.109	.019	-.057	-.186
140	234	-.116	.021	-.049	-.197
140	235	-.090	.022	-.013	-.195
140	236	-.129	.025	-.017	-.207
140	239	-.123	.022	-.024	-.206
140	246	-.112	.022	.002	-.194
140	251	-.096	.029	-.036	-.219
140	252	-.112	.025	-.015	-.211
140	253	-.084	.023	-.010	-.170
140	255	-.100	.018	-.032	-.170
140	257	-.102	.027	-.019	-.242
150	101	.019	.055	.222	-.190
150	102	-.002	.040	.203	-.110
150	103	-.226	.048	-.083	-.474
150	104	-.085	.033	.062	-.210
150	105	.061	.057	.302	-.075
150	106	.115	.059	.371	-.026
150	107	-.223	.043	-.087	-.413
150	108	-.053	.038	.113	-.189
150	109	-.238	.044	-.085	-.406
150	110	.041	.044	.207	-.086
150	111	-.248	.042	-.143	-.423
150	112	-.298	.056	-.167	-.571
150	113	.012	.047	.184	-.157
150	114	-.263	.055	-.144	-.480
150	115	-.298	.057	-.170	-.545

APPENDIX A -- PRESSURE DATA: HELIOS TENSION STRUCTURE -- WITH WALL

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
150	116	-.083	.048	.097	-.250
150	117	-.201	.033	-.094	-.330
150	118	-.348	.076	-.170	-.666
150	119	-.089	.050	.059	-.262
150	120	-.209	.047	-.081	-.412
150	121	-.128	.054	.015	-.401
150	122	-.353	.085	-.167	-.693
150	123	-.271	.056	-.129	-.489
150	124	-.091	.064	.099	-.334
150	125	-.348	.088	-.165	-.707
150	126	-.088	.060	.112	-.315
150	127	-.238	.059	-.046	-.546
150	128	-.270	.070	-.049	-.620
150	129	-.294	.081	-.098	-.677
150	130	-.277	.065	-.137	-.688
150	131	-.412	.077	-.205	-.727
150	132	-.360	.074	-.145	-.668
150	133	-.351	.077	-.155	-.727
150	134	-.289	.078	-.051	-.666
150	135	-.161	.057	.030	-.484
150	136	-.295	.068	-.135	-.740
150	137	-.356	.078	-.154	-.643
150	138	-.288	.071	-.139	-.845
150	139	-.222	.077	.060	-.833
150	140	-.300	.080	-.107	-.776
150	141	-.341	.080	-.170	-.917
150	142	-.338	.076	-.130	-.633
150	143	-.312	.087	-.056	-.665
150	144	-.297	.101	.001	-.899
150	145	-.169	.036	-.045	-.333
150	146	-.332	.078	-.145	-.765
150	147	-.242	.100	.074	-.901
150	148	-.295	.064	-.091	-.578
150	149	-.253	.098	.071	-.780
150	150	-.285	.081	-.040	-.824
150	151	-.221	.077	.005	-.629
150	152	-.221	.058	-.031	-.497
150	153	-.242	.056	.003	-.501
150	154	-.242	.081	.031	-.744
150	155	-.165	.067	.043	-.519
150	156	-.179	.064	.053	-.501
150	157	-.156	.051	.020	-.414
150	201	-.204	.049	-.082	-.410
150	203	-.161	.032	-.069	-.323
150	204	-.176	.037	-.083	-.373
150	205	-.174	.040	-.062	-.442
150	206	-.169	.033	-.060	-.383
150	209	-.173	.043	.012	-.373
150	212	-.172	.036	-.068	-.356
150	213	-.170	.026	-.105	-.266

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
150	226	-.154	.022	-.088	-.242
150	230	-.159	.021	-.100	-.244
150	232	-.161	.024	-.072	-.271
150	233	-.147	.020	-.086	-.235
150	234	-.149	.027	-.055	-.253
150	235	-.132	.026	-.038	-.247
150	236	-.157	.023	-.089	-.251
150	239	-.141	.027	-.031	-.253
150	246	-.146	.022	-.082	-.226
150	251	-.148	.025	-.067	-.259
150	252	-.147	.026	-.062	-.258
150	253	-.146	.027	-.064	-.280
150	255	-.123	.023	-.047	-.214
150	257	-.124	.034	-.026	-.313
160	101	.051	.069	.282	-.288
160	102	.034	.046	.209	-.095
160	103	-.241	.052	-.089	-.537
160	104	-.046	.037	.091	-.188
160	105	.073	.060	.289	-.081
160	106	.137	.071	.398	-.039
160	107	-.203	.042	-.078	-.374
160	108	-.013	.043	.177	-.182
160	109	-.233	.041	-.111	-.380
160	110	.052	.050	.238	-.072
160	111	-.219	.040	-.098	-.411
160	112	-.279	.048	-.156	-.470
160	113	-.015	.046	.184	-.137
160	114	-.213	.053	-.070	-.414
160	115	-.279	.056	-.134	-.507
160	116	-.032	.051	.161	-.215
160	117	-.207	.034	-.061	-.338
160	118	-.350	.081	-.143	-.682
160	119	-.135	.051	.007	-.354
160	120	-.219	.044	-.081	-.405
160	121	-.060	.052	.106	-.256
160	122	-.342	.070	-.165	-.620
160	123	-.275	.052	-.088	-.456
160	124	-.147	.060	.034	-.382
160	125	-.355	.082	-.173	-.695
160	126	-.022	.063	.198	-.251
160	127	-.246	.055	-.068	-.444
160	128	-.265	.066	-.066	-.567
160	129	-.275	.079	-.070	-.614
160	130	-.256	.057	-.116	-.555
160	131	-.392	.086	-.165	-.723
160	132	-.386	.077	-.210	-.642
160	133	-.339	.075	-.147	-.686
160	134	-.295	.076	-.092	-.611
160	135	-.203	.063	-.022	-.589
160	136	-.268	.070	-.124	-.606

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
160	137	-.344	.083	-.120	-.691
160	138	-.276	.078	-.102	-.771
160	139	-.212	.059	-.007	-.541
160	140	-.277	.081	-.074	-.739
160	141	-.307	.080	-.140	-.864
160	142	-.331	.076	-.090	-.638
160	143	-.321	.077	-.083	-.637
160	144	-.286	.102	-.015	-.811
160	145	-.181	.033	-.067	-.318
160	146	-.320	.082	-.127	-.762
160	147	-.246	.095	-.059	-.789
160	148	-.290	.075	-.061	-.651
160	149	-.268	.086	-.037	-.823
160	150	-.279	.085	-.032	-.850
160	151	-.238	.072	-.035	-.813
160	152	-.254	.062	-.052	-.601
160	153	-.271	.057	-.114	-.527
160	154	-.247	.087	.068	-.844
160	155	-.179	.057	.014	-.709
160	156	-.194	.073	.032	-.689
160	157	-.176	.056	.032	-.479
160	201	-.244	.057	-.103	-.481
160	203	-.176	.039	-.079	-.432
160	204	-.184	.035	-.052	-.388
160	205	-.195	.049	-.097	-.481
160	206	-.188	.033	-.088	-.314
160	209	-.189	.048	-.062	-.498
160	212	-.179	.036	-.067	-.430
160	213	-.185	.029	-.093	-.311
160	226	-.166	.024	-.089	-.252
160	230	-.169	.022	-.111	-.246
160	232	-.187	.027	-.115	-.274
160	233	-.160	.023	-.093	-.229
160	234	-.170	.027	-.080	-.262
160	235	-.156	.029	-.065	-.272
160	236	-.176	.024	-.105	-.292
160	239	-.147	.024	-.081	-.258
160	246	-.169	.023	-.083	-.244
160	251	-.168	.025	-.088	-.275
160	252	-.177	.028	-.093	-.292
160	253	-.169	.030	-.072	-.297
160	255	-.148	.024	-.075	-.254
160	257	-.139	.034	-.043	-.334
170	101	.095	.078	.327	-.144
170	102	.075	.062	.331	-.077
170	103	-.233	.048	.093	-.462
170	104	-.004	.047	.233	-.124
170	105	.103	.070	.354	-.062
170	106	.147	.068	.407	-.054
170	107	-.167	.041	.004	-.343

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
170	108	-.034	.055	.262	-.105
170	109	-.217	.034	-.106	-.371
170	110	-.052	.049	.235	-.079
170	111	-.166	.038	-.035	-.309
170	112	-.274	.047	-.164	-.476
170	113	-.013	.040	.150	-.172
170	114	-.142	.054	.024	-.348
170	115	-.227	.046	-.087	-.424
170	116	-.007	.053	.244	-.135
170	117	-.219	.028	-.121	-.323
170	118	-.353	.068	-.189	-.671
170	119	-.174	.047	-.024	-.359
170	120	-.236	.046	-.125	-.457
170	121	-.010	.056	.190	-.224
170	122	-.307	.070	-.129	-.563
170	123	-.281	.052	-.143	-.505
170	124	-.209	.064	-.029	-.391
170	125	-.315	.073	-.112	-.629
170	126	.023	.066	.278	-.179
170	127	-.267	.055	-.097	-.463
170	128	-.282	.065	-.100	-.545
170	129	-.292	.081	-.074	-.664
170	130	-.263	.067	-.082	-.574
170	131	-.383	.093	-.150	-.833
170	132	-.389	.079	-.182	-.748
170	133	-.308	.078	-.120	-.629
170	134	-.292	.065	-.094	-.590
170	135	-.197	.056	.000	-.541
170	136	-.255	.070	-.096	-.665
170	137	-.317	.088	-.070	-.693
170	138	-.260	.084	-.080	-.769
170	139	-.226	.054	-.037	-.458
170	140	-.288	.094	-.086	-.992
170	141	-.294	.084	-.105	-.721
170	142	-.327	.087	-.038	-.686
170	143	-.295	.076	-.087	-.665
170	144	-.269	.091	.010	-.645
170	145	-.190	.032	-.072	-.312
170	146	-.282	.073	-.134	-.728
170	147	-.234	.072	-.011	-.654
170	148	-.281	.080	-.064	-.807
170	149	-.254	.082	.027	-.666
170	150	-.272	.083	-.015	-.724
170	151	-.224	.071	-.002	-.587
170	152	-.257	.065	-.049	-.632
170	153	-.250	.063	-.083	-.568
170	154	-.258	.102	.041	-.846
170	155	-.181	.043	-.041	-.384
170	156	-.197	.075	-.050	-.708
170	157	-.170	.043	-.007	-.406
170	201	-.258	.057	-.112	-.553
170	203	-.200	.043	-.104	-.398
170	204	-.207	.038	-.107	-.430
170	205	-.205	.047	-.111	-.549
170	206	-.189	.030	-.080	-.316
170	209	-.212	.048	-.095	-.497
170	212	-.203	.039	-.084	-.435
170	213	-.187	.027	-.102	-.289
170	226	-.179	.026	-.097	-.294
170	230	-.179	.025	-.104	-.275
170	232	-.190	.026	-.112	-.299
170	233	-.167	.023	-.100	-.266
170	234	-.177	.028	-.084	-.299
170	235	-.171	.032	-.062	-.379
170	236	-.181	.026	-.109	-.292
170	239	-.170	.027	-.085	-.272
170	246	-.185	.026	-.119	-.336
170	251	-.185	.029	-.083	-.306
170	252	-.179	.028	-.102	-.294
170	253	-.169	.028	-.088	-.289
170	255	-.159	.025	-.077	-.250
170	257	-.144	.030	-.064	-.306
180	101	.099	.083	.391	-.150
180	102	.105	.068	.402	-.052
180	103	-.213	.045	-.106	-.543
180	104	.052	.058	.296	-.105
180	105	.119	.071	.370	-.047
180	106	.148	.070	.409	-.016
180	107	-.124	.043	.039	-.288
180	108	-.073	.060	.327	-.098
180	109	-.173	.035	-.049	-.332
180	110	.054	.054	.257	-.079
180	111	-.115	.041	.050	-.263
180	112	-.234	.042	-.105	-.424
180	113	-.038	.044	.124	-.166
180	114	-.083	.054	-.105	-.275
180	115	-.184	.046	-.027	-.373
180	116	.041	.059	.243	-.133
180	117	-.209	.029	-.120	-.313
180	118	-.310	.057	-.154	-.570
180	119	-.203	.047	-.061	-.413
180	120	-.243	.045	-.138	-.445
180	121	.023	.058	.211	-.133
180	122	-.253	.063	-.070	-.574
180	123	-.267	.046	-.146	-.452
180	124	-.257	.065	-.067	-.516
180	125	-.289	.072	-.080	-.596
180	126	.057	.068	.316	-.137
180	127	-.277	.052	-.129	-.473
180	128	-.292	.064	-.110	-.532
180	129	-.299	.077	-.119	-.680
180	130	-.275	.064	-.109	-.595
180	131	-.339	.096	-.150	-.784
180	132	-.365	.080	-.175	-.714
180	133	-.272	.068	-.126	-.637
180	134	-.324	.069	-.165	-.628
180	135	-.187	.052	-.052	-.466
180	136	-.245	.065	-.105	-.621
180	137	-.305	.091	-.095	-.686
180	138	-.264	.084	-.071	-.872
180	139	-.231	.047	-.072	-.406
180	140	-.275	.092	-.069	-.786
180	141	-.290	.076	-.107	-.699
180	142	-.316	.088	-.023	-.684
180	143	-.300	.081	-.078	-.642
180	144	-.267	.079	-.006	-.790
180	145	-.200	.030	-.110	-.311
180	146	-.290	.069	-.145	-.646
180	147	-.234	.054	-.053	-.456
180	148	-.285	.090	-.051	-.833
180	149	-.242	.080	.032	-.577
180	150	-.296	.079	-.072	-.616
180	151	-.233	.074	-.017	-.592
180	152	-.261	.068	-.049	-.570
180	153	-.270	.080	-.047	-.704
180	154	-.273	.090	.012	-.817
180	155	-.174	.032	-.042	-.329
180	156	-.187	.050	.027	-.654
180	157	-.163	.036	-.054	-.364
180	201	-.261	.058	-.120	-.520
180	203	-.205	.043	-.107	-.405
180	204	-.211	.037	-.097	-.505
180	205	-.198	.037	-.107	-.407
180	206	-.189	.028	-.105	-.341
180	209	-.216	.045	-.107	-.476
180	212	-.213	.036	-.122	-.390
180	213	-.193	.026	-.100	-.288
180	226	-.189	.026	-.110	-.291
180	230	-.187	.025	-.107	-.286
180	232	-.187	.026	-.112	-.294
180	233	-.173	.023	-.112	-.267
180	234	-.193	.031	-.097	-.306
180	235	-.204	.053	-.079	-.607
180	236	-.193	.025	-.112	-.284
180	239	-.174	.025	-.095	-.276
180	246	-.188	.025	-.112	-.279
180	251	-.186	.028	-.098	-.312
180	252	-.180	.028	-.105	-.435
180	253	-.167	.026	-.076	-.276
180	255	-.165	.027	-.083	-.276

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
180	257	-.154	.036	-.050	-.360
190	101	.122	.082	.456	-.219
190	102	.123	.067	.385	-.037
190	103	-.176	.049	-.025	-.384
190	104	.086	.062	.329	-.079
190	105	.117	.068	.403	-.051
190	106	.154	.073	.446	-.021
190	107	-.060	.047	.140	-.211
190	108	-.095	.059	.328	-.061
190	109	-.109	.039	.054	-.255
190	110	.048	.052	.248	-.072
190	111	-.045	.052	.176	-.217
190	112	-.161	.041	-.051	-.334
190	113	-.069	.037	.077	-.195
190	114	-.012	.063	.214	-.243
190	115	-.115	.051	.083	-.301
190	116	.062	.060	.287	-.105
190	117	-.156	.032	-.051	-.287
190	118	-.245	.054	-.090	-.464
190	119	-.232	.047	-.095	-.395
190	120	-.241	.045	-.114	-.410
190	121	.040	.056	.246	-.150
190	122	-.169	.065	.034	-.425
190	123	-.226	.043	-.086	-.406
190	124	-.299	.066	-.133	-.558
190	125	-.189	.068	.015	-.425
190	126	.077	.069	.322	-.137
190	127	-.261	.045	-.151	-.429
190	128	-.291	.055	-.141	-.509
190	129	-.310	.075	-.121	-.719
190	130	-.277	.064	-.123	-.649
190	131	-.331	.080	-.139	-.634
190	132	-.377	.083	-.181	-.688
190	133	-.300	.077	-.138	-.733
190	134	-.325	.064	-.161	-.556
190	135	-.127	.033	.008	-.307
190	136	-.265	.060	-.104	-.591
190	137	-.319	.088	-.082	-.698
190	138	-.294	.080	-.127	-.785
190	139	-.240	.042	-.118	-.400
190	140	-.287	.085	-.079	-.808
190	141	-.287	.066	-.142	-.646
190	142	-.318	.089	-.045	-.717
190	143	-.314	.078	-.066	-.675
190	144	-.293	.072	-.060	-.595
190	145	-.203	.029	-.127	-.303
190	146	-.291	.073	-.126	-.760
190	147	-.253	.050	-.094	-.415
190	148	-.305	.092	-.063	-.944
190	149	-.254	.086	.076	-.842

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
190	150	-.293	.064	-.092	-.510
190	151	-.248	.080	-.032	-.720
190	152	-.290	.072	-.051	-.621
190	153	-.307	.090	-.025	-.772
190	154	-.257	.062	-.033	-.535
190	155	-.181	.030	-.074	-.291
190	156	-.169	.028	-.078	-.339
190	157	-.155	.030	-.086	-.386
190	201	-.283	.066	-.131	-.719
190	203	-.231	.049	-.109	-.474
190	204	-.213	.046	-.092	-.459
190	205	-.189	.035	-.095	-.363
190	206	-.193	.030	-.097	-.346
190	209	-.216	.042	-.093	-.377
190	212	-.209	.035	-.114	-.378
190	213	-.189	.028	-.118	-.296
190	226	-.187	.027	-.112	-.284
190	230	-.183	.027	-.114	-.284
190	232	-.195	.027	-.119	-.304
190	233	-.185	.025	-.109	-.277
190	234	-.185	.027	-.092	-.307
190	235	-.255	.079	-.071	-.715
190	236	-.197	.027	-.121	-.297
190	239	-.171	.028	-.083	-.311
190	246	-.188	.026	-.102	-.302
190	251	-.187	.029	-.118	-.315
190	252	-.187	.031	-.107	-.378
190	253	-.173	.029	-.078	-.289
190	255	-.177	.037	-.045	-.351
190	257	-.183	.042	-.071	-.415
200	101	.127	.077	.408	-.101
200	102	.140	.070	.422	-.050
200	103	-.099	.046	.050	-.346
200	104	.110	.058	.315	-.059
200	105	.093	.062	.371	-.055
200	106	.143	.074	.420	-.034
200	107	.035	.058	.288	-.158
200	108	.111	.061	.342	-.039
200	109	-.041	.043	.120	-.166
200	110	.046	.048	.232	-.133
200	111	.021	.058	.199	-.191
200	112	-.083	.045	.137	-.245
200	113	-.089	.032	.027	-.242
200	114	.042	.066	.250	-.207
200	115	-.037	.056	.130	-.250
200	116	.057	.057	.263	-.077
200	117	-.078	.034	.056	-.205
200	118	-.161	.055	.004	-.397
200	119	-.252	.050	-.110	-.437
200	120	-.225	.044	-.100	-.402

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
200	121	.020	.054	.229	-.150
200	122	-.073	.064	.162	-.272
200	123	-.148	.042	.012	-.317
200	124	-.321	.069	-.148	-.643
200	125	-.100	.067	.118	-.346
200	126	.059	.066	.360	-.127
200	127	-.238	.040	-.129	-.411
200	128	-.281	.051	-.141	-.493
200	129	-.349	.077	-.154	-.677
200	130	-.329	.079	-.156	-.945
200	131	-.333	.072	-.150	-.632
200	132	-.344	.076	-.161	-.712
200	133	-.289	.069	-.133	-.612
200	134	-.333	.056	-.181	-.550
200	135	-.080	.030	.074	-.202
200	136	-.269	.059	-.089	-.593
200	137	-.325	.079	-.138	-.762
200	138	-.309	.066	-.150	-.604
200	139	-.267	.040	-.149	-.430
200	140	-.308	.079	-.100	-.670
200	141	-.326	.067	-.163	-.808
200	142	-.350	.087	-.110	-.713
200	143	-.312	.074	-.044	-.633
200	144	-.305	.067	-.133	-.572
200	145	-.193	.024	-.115	-.281
200	146	-.313	.072	-.153	-.807
200	147	-.280	.049	-.147	-.441
200	148	-.319	.082	-.080	-.720
200	149	-.276	.094	-.048	-.678
200	150	-.320	.053	-.148	-.537
200	151	-.256	.079	-.017	-.664
200	152	-.288	.063	-.121	-.573
200	153	-.302	.079	-.086	-.751
200	154	-.273	.048	-.108	-.471
200	155	-.191	.028	-.111	-.296
200	156	-.182	.023	-.107	-.276
200	157	-.174	.029	-.107	-.433
200	201	-.295	.071	-.121	-.679
200	203	-.257	.049	-.119	-.517
200	204	-.251	.063	-.095	-.523
200	205	-.192	.037	-.088	-.377
200	206	-.184	.033	-.094	-.380
200	209	-.222	.046	-.103	-.418
200	212	-.214	.038	-.108	-.371
200	213	-.169	.023	-.104	-.261
200	226	-.176	.026	-.100	-.259
200	230	-.169	.025	-.098	-.253
200	232	-.185	.024	-.114	-.309
200	233	-.176	.023	-.119	-.254
200	234	-.184	.030	-.082	-.316

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
200	235	-.283	.077	-.092	-.680
200	236	-.183	.025	-.084	-.274
200	239	-.183	.034	-.007	-.325
200	246	-.173	.024	-.094	-.252
200	251	-.171	.026	-.090	-.265
200	252	-.174	.024	-.107	-.269
200	253	-.159	.026	-.024	-.258
200	255	-.193	.052	-.028	-.472
200	257	-.197	.046	-.091	-.440
210	101	.118	.065	.383	-.112
210	102	.132	.061	.381	-.017
210	103	-.026	.050	.147	-.284
210	104	.141	.061	.383	-.014
210	105	.087	.055	.322	-.091
210	106	.120	.062	.406	-.041
210	107	.089	.060	.307	-.100
210	108	.103	.056	.300	-.032
210	109	.046	.051	.231	-.096
210	110	.037	.042	.205	-.076
210	111	.091	.060	.339	-.075
210	112	.007	.048	.167	-.148
210	113	-.109	.028	-.007	-.219
210	114	.090	.062	.312	-.080
210	115	.049	.057	.282	-.137
210	116	.032	.049	.229	-.107
210	117	.003	.039	.150	-.128
210	118	-.074	.060	.113	-.304
210	119	-.278	.053	-.131	-.506
210	120	-.201	.042	-.086	-.363
210	121	-.028	.054	.156	-.235
210	122	.018	.065	.231	-.204
210	123	-.069	.043	.083	-.223
210	124	-.332	.067	-.177	-.642
210	125	.003	.063	.201	-.183
210	126	.031	.060	.271	-.187
210	127	-.192	.039	-.092	-.378
210	128	-.241	.049	-.124	-.480
210	129	-.366	.074	-.205	-.693
210	130	-.362	.072	-.179	-.702
210	131	-.333	.065	-.183	-.626
210	132	-.330	.070	-.160	-.586
210	133	-.310	.064	-.169	-.588
210	134	-.300	.053	-.177	-.554
210	135	-.038	.037	.145	-.149
210	136	-.306	.060	-.152	-.991
210	137	-.346	.082	-.167	-.775
210	138	-.338	.069	-.181	-.683
210	139	-.237	.041	-.125	-.408
210	140	-.328	.067	-.130	-.583
210	141	-.355	.071	-.175	-.694

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
210	142	-.360	.093	-.097	-.870
210	143	-.300	.079	-.088	-.602
210	144	-.327	.067	-.140	-.633
210	145	-.154	.025	-.047	-.255
210	146	-.352	.082	-.162	-.921
210	147	-.283	.047	-.146	-.452
210	148	-.315	.071	-.122	-.670
210	149	-.262	.092	.001	-.727
210	150	-.330	.052	-.203	-.529
210	151	-.269	.085	-.047	-.628
210	152	-.293	.068	-.122	-.637
210	153	-.306	.071	-.100	-.653
210	154	-.280	.043	-.155	-.445
210	155	-.187	.027	-.114	-.278
210	156	-.179	.025	-.115	-.285
210	157	-.162	.029	-.093	-.349
210	201	-.312	.085	-.107	-.707
210	203	-.280	.057	-.103	-.521
210	204	-.286	.074	-.028	-.815
210	205	-.182	.040	-.078	-.361
210	206	-.175	.034	-.078	-.339
210	209	-.232	.046	-.086	-.461
210	212	-.224	.040	-.106	-.381
210	213	-.166	.026	-.098	-.272
210	226	-.162	.025	-.077	-.253
210	230	-.163	.024	-.086	-.252
210	232	-.175	.027	-.095	-.284
210	233	-.175	.026	-.108	-.287
210	234	-.187	.032	-.078	-.363
210	235	-.258	.067	-.050	-.628
210	236	-.183	.028	-.065	-.291
210	239	-.197	.044	-.029	-.408
210	246	-.177	.028	-.093	-.294
210	251	-.158	.026	-.065	-.263
210	252	-.164	.036	-.011	-.279
210	253	-.152	.037	-.060	-.279
210	255	-.198	.059	-.030	-.590
210	257	-.195	.056	-.090	-.577
220	101	.079	.048	.339	-.059
220	102	.105	.054	.312	-.035
220	103	.041	.052	.201	-.128
220	104	.135	.059	.337	.004
220	105	.101	.042	.322	-.001
220	106	.100	.056	.296	-.082
220	107	.122	.063	.398	-.026
220	108	.074	.049	.268	-.080
220	109	.144	.054	.333	-.001
220	110	.024	.039	.212	-.100
220	111	.137	.062	.341	-.042
220	112	.083	.057	.277	-.056

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
220	113	-.123	.026	-.025	-.223
220	114	.107	.061	.304	-.050
220	115	.113	.061	.299	-.086
220	116	-.023	.048	.142	-.217
220	117	.079	.048	.247	-.064
220	118	.020	.058	.209	-.199
220	119	-.285	.047	-.144	-.492
220	120	-.157	.040	-.032	-.374
220	121	-.103	.056	.111	-.308
220	122	.082	.063	.307	-.111
220	123	.017	.050	.199	-.135
220	124	-.331	.064	-.175	-.665
220	125	.069	.065	.303	-.117
220	126	-.046	.061	.176	-.261
220	127	-.127	.037	.012	-.260
220	128	-.168	.043	-.032	-.314
220	129	-.305	.069	-.121	-.582
220	130	-.335	.070	-.139	-.656
220	131	-.362	.069	-.181	-.649
220	132	-.310	.065	-.127	-.627
220	133	-.335	.068	-.153	-.639
220	134	-.230	.049	-.082	-.440
220	135	.027	.050	.243	-.102
220	136	-.336	.059	-.178	-.983
220	137	-.381	.080	-.192	-.778
220	138	-.374	.069	-.184	-.676
220	139	-.146	.037	-.053	-.303
220	140	-.352	.070	-.182	-.611
220	141	-.383	.075	-.181	-.988
220	142	-.367	.096	-.068	-.829
220	143	-.280	.089	-.034	-.679
220	144	-.367	.069	-.201	-.651
220	145	-.098	.029	-.028	-.190
220	146	-.373	.077	-.175	-.776
220	147	-.264	.042	-.142	-.438
220	148	-.331	.061	-.158	-.563
220	149	-.220	.092	.031	-.684
220	150	-.353	.052	-.235	-.556
220	151	-.206	.068	-.037	-.624
220	152	-.275	.069	-.059	-.635
220	153	-.290	.055	-.115	-.538
220	154	-.291	.042	-.187	-.452
220	155	-.158	.023	-.082	-.244
220	156	-.123	.026	-.053	-.241
220	157	-.099	.027	-.032	-.322
220	201	-.301	.084	-.098	-.668
220	203	-.288	.061	-.142	-.535
220	204	-.266	.072	-.103	-.583
220	205	-.151	.044	-.027	-.448
220	206	-.190	.049	-.056	-.515

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
220	209	-.213	.054	-.048	-.448
220	212	-.216	.055	-.054	-.477
220	213	-.154	.026	-.070	-.254
220	226	-.137	.027	-.052	-.246
220	230	-.119	.025	-.039	-.214
220	232	-.148	.027	-.048	-.286
220	233	-.156	.025	-.050	-.281
220	234	-.203	.041	-.043	-.370
220	235	-.264	.071	-.079	-.746
220	236	-.172	.028	-.081	-.288
220	239	-.174	.049	.024	-.375
220	246	-.144	.032	.102	-.256
220	251	-.130	.027	-.022	-.278
220	252	-.113	.045	.137	-.256
220	253	-.118	.047	.122	-.290
220	255	-.223	.071	-.036	-.615
220	257	-.166	.064	-.053	-.490
230	101	.051	.039	.244	-.092
230	102	.070	.043	.231	-.035
230	103	.086	.050	.249	-.083
230	104	.113	.049	.294	-.021
230	105	.058	.035	.209	-.027
230	106	.072	.045	.275	-.037
230	107	.146	.060	.342	-.011
230	108	.030	.040	.180	-.102
230	109	.183	.059	.412	.013
230	110	.018	.034	.154	-.086
230	111	.141	.059	.388	.003
230	112	.128	.053	.327	-.006
230	113	-.139	.023	-.038	-.221
230	114	.073	.054	.300	-.073
230	115	.137	.060	.338	-.010
230	116	-.100	.048	.060	-.288
230	117	.139	.057	.337	-.013
230	118	.094	.059	.307	-.089
230	119	-.278	.048	-.151	-.466
230	120	-.109	.037	.020	-.262
230	121	-.208	.061	-.027	-.443
230	122	.114	.059	.313	-.046
230	123	.096	.056	.282	-.057
230	124	-.323	.061	-.152	-.558
230	125	.097	.062	.335	-.048
230	126	-.141	.062	.055	-.397
230	127	-.049	.041	.103	-.190
230	128	-.085	.042	.063	-.231
230	129	-.202	.068	-.015	-.461
230	130	-.257	.074	-.051	-.536
230	131	-.385	.074	-.185	-.722
230	132	-.280	.056	-.067	-.503
230	133	-.344	.061	-.181	-.621
230	134	-.123	.046	.059	-.292
230	135	-.103	.065	.350	-.053
230	136	-.344	.066	-.163	-.725
230	137	-.387	.069	-.200	-.724
230	138	-.395	.075	-.198	-.669
230	139	-.083	.037	.032	-.228
230	140	-.380	.071	-.209	-.624
230	141	-.381	.068	-.193	-.887
230	142	-.368	.080	-.117	-.744
230	143	-.246	.084	-.022	-.647
230	144	-.331	.057	-.180	-.547
230	145	-.021	.040	.129	-.133
230	146	-.370	.065	-.189	-.657
230	147	-.223	.043	-.114	-.385
230	148	-.346	.061	-.180	-.578
230	149	-.164	.068	.053	-.474
230	150	-.341	.052	-.206	-.534
230	151	-.157	.055	.081	-.453
230	152	-.263	.073	-.042	-.692
230	153	-.284	.051	-.138	-.470
230	154	-.277	.043	-.145	-.428
230	155	-.113	.024	-.011	-.206
230	156	-.097	.023	-.030	-.183
230	157	-.071	.024	-.004	-.254
230	201	-.258	.069	-.081	-.641
230	203	-.314	.068	-.140	-.570
230	204	-.204	.051	-.076	-.456
230	205	-.140	.049	-.032	-.364
230	206	-.183	.053	-.056	-.531
230	209	-.226	.061	-.039	-.512
230	212	-.201	.057	-.037	-.451
230	213	-.130	.029	-.029	-.246
230	226	-.115	.030	-.005	-.273
230	230	-.100	.028	-.013	-.219
230	232	-.124	.030	.007	-.252
230	233	-.127	.030	-.012	-.215
230	234	-.182	.049	-.028	-.370
230	235	-.296	.091	-.085	-.718
230	236	-.141	.035	.017	-.262
230	239	-.187	.057	-.029	-.418
230	246	-.099	.044	.112	-.299
230	251	-.114	.032	-.015	-.246
230	252	-.063	.050	.205	-.229
230	253	-.093	.051	.157	-.259
230	255	-.243	.065	.012	-.608
230	257	-.166	.069	-.025	-.481
240	101	.017	.030	.157	-.087
240	102	.038	.035	.168	-.055
240	103	.113	.049	.297	-.017
240	104	.077	.043	.236	-.056
240	105	.020	.027	.142	-.066
240	106	.038	.033	.183	-.049
240	107	.134	.059	.390	-.011
240	108	-.026	.034	.123	-.145
240	109	.208	.061	.426	.049
240	110	.019	.028	.122	-.075
240	111	.128	.057	.309	-.007
240	112	.152	.055	.326	.022
240	113	-.134	.023	-.062	-.232
240	114	.018	.051	.186	-.180
240	115	.141	.061	.362	.005
240	116	-.180	.056	-.035	-.377
240	117	.206	.062	.424	.052
240	118	.116	.055	.321	-.043
240	119	-.251	.044	-.130	-.411
240	120	-.054	.036	.070	-.170
240	121	-.299	.074	-.127	-.531
240	122	.094	.057	.321	-.113
240	123	.148	.066	.427	-.005
240	124	-.289	.056	-.149	-.501
240	125	.074	.056	.312	-.081
240	126	-.236	.061	-.026	-.448
240	127	.031	.048	.194	-.118
240	128	.005	.045	.158	-.133
240	129	-.072	.060	.103	-.307
240	130	-.138	.072	.125	-.381
240	131	-.383	.076	-.203	-.758
240	132	-.230	.058	-.004	-.500
240	133	-.321	.061	-.170	-.619
240	134	-.021	.046	.137	-.203
240	135	.149	.067	.370	-.065
240	136	-.314	.059	-.168	-.581
240	137	-.349	.068	-.195	-.663
240	138	-.380	.081	-.172	-.737
240	139	-.014	.038	.161	-.147
240	140	-.386	.072	-.162	-.631
240	141	-.377	.077	-.203	-.766
240	142	-.338	.073	-.096	-.681
240	143	-.203	.076	-.017	-.597
240	144	-.259	.058	-.077	-.501
240	145	.051	.049	.271	-.076
240	146	-.333	.060	-.150	-.586
240	147	-.159	.039	-.011	-.302
240	148	-.344	.063	-.165	-.627
240	149	-.125	.058	.077	-.434
240	150	-.289	.049	-.148	-.470
240	151	-.107	.048	.100	-.354
240	152	-.205	.055	-.054	-.488
240	153	-.256	.046	-.140	-.462
240	154	-.242	.039	-.117	-.381

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
240	155	-.062	.028	.064	-.147
240	156	-.091	.029	-.008	-.214
240	157	-.060	.023	.013	-.178
240	201	-.238	.066	-.080	-.545
240	203	-.371	.086	-.149	-.702
240	204	-.213	.055	-.044	-.507
240	205	-.132	.047	-.001	-.406
240	206	-.160	.051	-.008	-.462
240	209	-.336	.092	-.117	-.718
240	212	-.248	.073	-.020	-.578
240	213	-.113	.030	.014	-.242
240	226	-.085	.028	.015	-.189
240	230	-.068	.026	.031	-.161
240	232	-.090	.030	.032	-.243
240	233	-.083	.039	.074	-.209
240	234	-.186	.055	-.028	-.415
240	235	-.282	.089	-.082	-.690
240	236	-.111	.040	.097	-.278
240	239	-.209	.072	.001	-.528
240	246	-.095	.037	.027	-.290
240	251	-.079	.028	.033	-.201
240	252	-.074	.042	.137	-.245
240	253	-.090	.053	.177	-.314
240	255	-.280	.078	-.048	-.610
240	257	-.192	.082	-.039	-.617
250	101	-.010	.023	.085	-.140
250	102	-.004	.028	.101	-.108
250	103	.106	.045	.276	-.017
250	104	.017	.033	.139	-.098
250	105	-.020	.021	.061	-.127
250	106	.003	.023	.110	-.072
250	107	.089	.049	.332	-.046
250	108	-.085	.032	.047	-.227
250	109	.188	.056	.382	.013
250	110	.001	.022	.102	-.074
250	111	.059	.046	.232	-.096
250	112	.151	.050	.340	.017
250	113	-.116	.024	-.034	-.236
250	114	-.077	.052	.086	-.312
250	115	.088	.050	.283	-.076
250	116	-.242	.059	-.107	-.465
250	117	.226	.072	.475	.024
250	118	.111	.056	.316	-.038
250	119	-.238	.048	-.105	-.452
250	120	-.012	.032	.104	-.118
250	121	-.364	.065	-.209	-.567
250	122	.033	.056	.232	-.143
250	123	.172	.064	.393	-.010
250	124	-.286	.057	-.088	-.544
250	125	-.011	.060	.215	-.227
250	126	-.306	.063	-.153	-.571
250	127	.094	.055	.307	-.038
250	128	.078	.050	.264	-.049
250	129	.039	.059	.230	-.166
250	130	.004	.067	.263	-.249
250	131	-.359	.079	-.153	-.841
250	132	-.220	.074	-.010	-.652
250	133	-.279	.054	-.135	-.541
250	134	.064	.049	.238	-.102
250	135	.199	.074	.470	.013
250	136	-.286	.053	-.142	-.512
250	137	-.332	.066	-.153	-.752
250	138	-.331	.068	-.141	-.600
250	139	.063	.040	.199	-.089
250	140	-.326	.078	-.124	-.661
250	141	-.355	.066	-.189	-.627
250	142	-.309	.072	-.093	-.598
250	143	-.135	.062	.049	-.456
250	144	-.150	.047	-.029	-.336
250	145	-.108	.062	.331	-.038
250	146	-.297	.054	-.155	-.575
250	147	-.081	.039	.051	-.271
250	148	-.297	.061	-.154	-.557
250	149	-.094	.066	.144	-.404
250	150	-.204	.041	-.070	-.439
250	151	-.063	.037	.082	-.295
250	152	-.153	.038	-.040	-.355
250	153	-.212	.039	-.103	-.356
250	154	-.184	.036	-.078	-.379
250	155	-.003	.034	.128	-.135
250	156	-.063	.027	.027	-.185
250	157	-.041	.026	.046	-.127
250	201	-.182	.060	-.010	-.595
250	203	-.263	.073	-.090	-.604
250	204	-.203	.085	.039	-.593
250	205	-.117	.046	.013	-.378
250	206	-.099	.039	.005	-.365
250	209	-.271	.083	-.072	-.750
250	212	-.249	.079	-.054	-.623
250	213	-.080	.048	.139	-.258
250	226	-.081	.031	.034	-.242
250	230	-.063	.027	.055	-.207
250	232	-.044	.036	.106	-.178
250	233	-.090	.036	.151	-.205
250	234	-.183	.053	-.027	-.407
250	235	-.229	.080	-.014	-.602
250	236	-.099	.036	.077	-.239
250	239	-.207	.068	-.025	-.546
250	246	-.076	.041	.084	-.237
250	251	-.050	.028	.077	-.160
250	252	-.043	.044	.163	-.242
250	253	-.088	.061	.132	-.439
250	255	-.261	.076	.003	-.703
250	257	-.195	.093	-.029	-.694
260	101	-.039	.021	.051	-.170
260	102	-.053	.022	.026	-.126
260	103	.071	.042	.253	-.044
260	104	-.060	.033	.057	-.194
260	105	-.059	.021	.018	-.146
260	106	-.035	.016	.028	-.090
260	107	.018	.037	.181	-.101
260	108	-.150	.037	-.054	-.284
260	109	.146	.054	.369	.001
260	110	-.021	.018	.053	-.081
260	111	-.017	.038	.145	-.139
260	112	.101	.049	.253	-.041
260	113	-.121	.028	-.039	-.294
260	114	-.172	.054	-.026	-.390
260	115	.016	.045	.174	-.139
260	116	-.276	.060	-.128	-.494
260	117	.236	.068	.444	.067
260	118	.049	.054	.238	-.118
260	119	-.241	.058	-.010	-.544
260	120	-.032	.047	.097	-.323
260	121	-.342	.059	-.177	-.587
260	122	-.061	.055	.116	-.270
260	123	.152	.059	.362	-.002
260	124	-.270	.063	-.109	-.618
260	125	-.130	.062	.054	-.357
260	126	-.310	.060	-.151	-.551
260	127	.135	.060	.368	-.046
260	128	.126	.054	.323	-.039
260	129	.113	.058	.326	-.046
260	130	.115	.064	.369	-.127
260	131	-.338	.067	-.177	-.717
260	132	-.215	.080	.025	-.659
260	133	-.245	.050	-.135	-.493
260	134	.115	.052	.289	-.022
260	135	.222	.081	.548	.035
260	136	-.287	.059	-.135	-.591
260	137	-.335	.085	-.111	-.854
260	138	-.249	.066	-.046	-.465
260	139	.116	.050	.289	-.016
260	140	-.236	.065	-.070	-.591
260	141	-.340	.064	-.174	-.623
260	142	-.304	.093	-.031	-.788
260	143	-.124	.069	.100	-.452
260	144	-.055	.047	.125	-.234
260	145	-.155	.067	.385	.018
260	146	-.276	.051	-.140	-.483

APPENDIX A -- PRESSURE DATA: HELIOS TENSION STRUCTURE -- WITH WALL

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
260	147	-.008	.042	.131	-.158
260	148	-.247	.054	-.120	-.409
260	149	-.072	.063	.163	-.424
260	150	-.121	.037	.028	-.271
260	151	-.052	.031	.086	-.230
260	152	-.132	.030	-.045	-.265
260	153	-.166	.036	-.071	-.292
260	154	-.120	.033	.022	-.245
260	155	.049	.039	.186	-.047
260	156	-.024	.024	.064	-.122
260	157	-.009	.027	.096	-.108
260	201	-.173	.061	-.029	-.487
260	203	-.196	.067	-.050	-.533
260	204	-.104	.070	.087	-.474
260	205	-.062	.050	.084	-.305
260	206	-.060	.034	.059	-.251
260	209	-.256	.087	-.023	-.761
260	212	-.184	.069	-.012	-.573
260	213	-.033	.039	.136	-.166
260	226	-.058	.030	.032	-.198
260	230	-.046	.025	.032	-.168
260	232	-.027	.030	.086	-.187
260	233	-.055	.033	.160	-.185
260	234	-.140	.050	.017	-.366
260	235	-.210	.088	-.038	-.837
260	236	-.070	.031	.081	-.204
260	239	-.194	.064	-.030	-.597
260	246	-.043	.039	.121	-.206
260	251	-.036	.025	.105	-.176
260	252	-.022	.038	.158	-.187
260	253	-.066	.052	.129	-.278
260	255	-.242	.069	.010	-.558
260	257	-.210	.097	-.023	-.773
270	101	-.109	.056	-.020	-.388
270	102	-.105	.025	-.025	-.207
270	103	.032	.036	.211	-.142
270	104	-.128	.032	-.040	-.294
270	105	-.083	.022	-.021	-.178
270	106	-.054	.015	.008	-.108
270	107	-.039	.027	.049	-.150
270	108	-.193	.039	-.092	-.373
270	109	.083	.043	.250	-.025
270	110	-.038	.021	.027	-.218
270	111	-.104	.034	.015	-.234
270	112	.038	.039	.191	-.093
270	113	-.146	.049	-.019	-.375
270	114	-.274	.060	-.127	-.474
270	115	-.079	.042	.063	-.224
270	116	-.290	.061	-.127	-.539
270	117	.209	.070	.454	.047
270	118	-.043	.048	.145	-.238
270	119	-.272	.086	.017	-.724
270	120	-.084	.072	.141	-.430
270	121	-.328	.062	-.161	-.589
270	122	-.187	.070	.008	-.432
270	123	.111	.058	.333	-.034
270	124	-.282	.082	-.085	-.856
270	125	-.259	.070	-.058	-.556
270	126	-.321	.070	-.143	-.652
270	127	.146	.063	.404	-.013
270	128	.141	.057	.358	-.007
270	129	.137	.061	.353	-.020
270	130	.176	.074	.419	-.006
270	131	-.311	.060	-.162	-.627
270	132	-.214	.072	-.005	-.539
270	133	-.245	.045	-.112	-.414
270	134	.130	.053	.308	-.017
270	135	.231	.079	.518	.040
270	136	-.302	.060	-.153	-.547
270	137	-.320	.076	-.093	-.779
270	138	-.128	.064	.046	-.374
270	139	.164	.058	.352	-.004
270	140	-.127	.054	.015	-.372
270	141	-.362	.063	-.205	-.620
270	142	-.267	.082	-.008	-.971
270	143	-.101	.067	.095	-.472
270	144	.029	.045	.176	-.134
270	145	.179	.073	.431	.015
270	146	-.289	.051	-.161	-.466
270	147	.058	.051	.248	-.105
270	148	-.172	.047	-.058	-.387
270	149	-.044	.039	.089	-.316
270	150	-.044	.038	.078	-.166
270	151	-.068	.042	.042	-.279
270	152	-.117	.029	-.032	-.247
270	153	-.116	.032	-.027	-.235
270	154	-.056	.033	.064	-.182
270	155	.103	.047	.273	-.017
270	156	.012	.023	.086	-.059
270	157	.016	.029	.127	-.076
270	201	-.117	.082	.079	-.414
270	203	-.147	.070	-.004	-.471
270	204	-.019	.043	.147	-.368
270	205	.009	.029	.128	-.183
270	206	-.012	.026	.126	-.190
270	209	-.217	.089	.013	-.627
270	212	-.131	.058	.025	-.409
270	213	.004	.029	.134	-.107
270	226	-.026	.026	.083	-.140
270	230	-.018	.020	.048	-.108
270	232	-.002	.027	.111	-.138
270	233	-.015	.030	.120	-.126
270	234	-.077	.045	.062	-.321
270	235	-.222	.107	-.007	-.760
270	236	-.027	.029	.074	-.145
270	239	-.190	.072	.017	-.497
270	246	-.003	.034	.156	-.123
270	251	-.019	.026	.165	-.150
270	252	-.007	.034	.148	-.316
270	253	-.039	.046	.106	-.334
270	255	-.221	.074	.008	-.592
270	257	-.175	.106	-.004	-.743
280	101	-.249	.057	-.075	-.490
280	102	-.162	.025	-.083	-.271
280	103	-.043	.053	.118	-.361
280	104	-.186	.036	-.088	-.307
280	105	-.107	.025	-.011	-.228
280	106	-.059	.017	.003	-.140
280	107	-.098	.030	-.016	-.246
280	108	-.241	.043	-.112	-.411
280	109	.014	.037	.157	-.123
280	110	-.054	.032	.069	-.271
280	111	-.184	.039	-.075	-.335
280	112	-.044	.038	.072	-.190
280	113	-.188	.072	-.009	-.705
280	114	-.352	.066	-.170	-.584
280	115	-.181	.050	-.041	-.370
280	116	-.313	.062	-.146	-.588
280	117	.156	.062	.381	-.036
280	118	-.148	.054	.039	-.378
280	119	-.314	.100	.015	-.881
280	120	-.116	.072	.099	-.525
280	121	-.371	.068	-.209	-.640
280	122	-.306	.074	-.101	-.572
280	123	.047	.048	.217	-.112
280	124	-.319	.085	-.111	-.768
280	125	-.371	.075	-.179	-.736
280	126	-.334	.072	-.148	-.659
280	127	.140	.065	.394	-.016
280	128	.132	.058	.358	-.007
280	129	.123	.062	.362	-.053
280	130	.182	.075	.444	-.016
280	131	-.362	.079	-.183	-.778
280	132	-.239	.093	.053	-.679
280	133	-.278	.055	-.144	-.588
280	134	.115	.051	.280	-.005
280	135	.214	.075	.455	.027
280	136	-.340	.059	-.161	-.571
280	137	-.319	.069	-.108	-.678
280	138	-.022	.060	.178	-.299

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
280	139	.178	.063	.376	.023
280	140	-.035	.051	.117	-.202
280	141	-.380	.066	-.206	-.633
280	142	-.215	.052	-.055	-.460
280	143	-.048	.040	.083	-.280
280	144	.096	.053	.311	-.069
280	145	.180	.075	.467	.013
280	146	-.281	.054	-.153	-.483
280	147	.105	.055	.302	-.055
280	148	-.103	.043	.020	-.363
280	149	-.021	.027	.099	-.129
280	150	.016	.042	.177	-.101
280	151	-.087	.048	.030	-.342
280	152	-.108	.023	-.040	-.208
280	153	-.071	.029	.030	-.202
280	154	-.004	.038	.145	-.137
280	155	.129	.052	.287	-.002
280	156	.048	.029	.152	-.028
280	157	.043	.032	.162	-.099
280	201	-.014	.025	.077	-.254
280	203	-.060	.053	.072	-.350
280	204	.025	.042	.190	-.195
280	205	.042	.031	.208	-.078
280	206	.025	.025	.136	-.079
280	209	-.131	.082	.068	-.542
280	212	-.060	.056	.116	-.291
280	213	.042	.029	.220	-.071
280	226	-.002	.027	.106	-.089
280	230	.005	.022	.091	-.078
280	232	.031	.030	.180	-.140
280	233	.023	.033	.146	-.083
280	234	-.028	.042	.111	-.231
280	235	-.211	.107	.029	-.615
280	236	.008	.028	.128	-.125
280	239	-.134	.063	.075	-.442
280	246	.028	.031	.225	-.084
280	251	.003	.028	.127	-.117
280	252	.016	.033	.170	-.150
280	253	-.004	.043	.158	-.558
280	255	-.193	.083	.069	-.700
280	257	-.110	.084	.010	-.675
290	101	-.288	.068	-.130	-.571
290	102	-.198	.029	-.097	-.315
290	103	-.177	.099	.012	-.603
290	104	-.236	.038	-.115	-.365
290	105	-.129	.029	-.038	-.292
290	106	-.056	.022	.043	-.321
290	107	-.163	.033	-.068	-.283
290	108	-.268	.055	-.119	-.500
290	109	-.081	.037	.070	-.229
290	110	-.070	.048	.106	-.385
290	111	-.247	.043	-.134	-.397
290	112	-.141	.037	-.003	-.288
290	113	-.206	.090	.059	-.632
290	114	-.395	.072	-.218	-.606
290	115	-.261	.056	-.112	-.449
290	116	-.344	.071	-.139	-.578
290	117	-.097	.053	.334	-.040
290	118	-.255	.054	-.096	-.509
290	119	-.327	.089	.053	-.853
290	120	-.146	.078	.057	-.567
290	121	-.438	.076	-.207	-.718
290	122	-.417	.097	-.184	-.770
290	123	-.030	.043	.161	-.188
290	124	-.362	.073	-.144	-.761
290	125	-.510	.093	-.278	-.822
290	126	-.370	.086	-.140	-.824
290	127	.108	.056	.303	-.094
290	128	.093	.050	.267	-.070
290	129	.058	.057	.268	-.177
290	130	.132	.068	.366	-.170
290	131	-.417	.097	-.172	-.928
290	132	-.218	.065	.103	-.571
290	133	-.326	.075	-.152	-.778
290	134	.045	.047	.213	-.105
290	135	.155	.063	.383	-.014
290	136	-.349	.067	-.170	-.644
290	137	-.338	.069	-.143	-.656
290	138	.061	.060	.300	-.127
290	139	.162	.062	.358	.023
290	140	.046	.053	.207	-.097
290	141	-.385	.077	-.195	-.655
290	142	-.222	.048	-.092	-.415
290	143	-.040	.032	.078	-.159
290	144	.126	.056	.314	-.025
290	145	.169	.075	.499	-.060
290	146	-.238	.051	-.110	-.406
290	147	.134	.058	.311	-.038
290	148	-.022	.042	.114	-.165
290	149	-.012	.031	.090	-.132
290	150	.072	.047	.263	-.035
290	151	-.053	.057	.117	-.312
290	152	-.077	.021	-.005	-.170
290	153	-.006	.029	.112	-.092
290	154	.050	.045	.232	-.053
290	155	.147	.056	.336	.003
290	156	.077	.037	.221	-.031
290	157	.062	.026	.190	-.060
290	201	.008	.023	.143	-.096
290	203	.031	.042	.210	-.214
290	204	.079	.040	.285	-.076
290	205	.073	.032	.245	-.073
290	206	.055	.026	.167	-.032
290	209	-.039	.075	.146	-.383
290	212	-.002	.059	.147	-.292
290	213	.081	.032	.222	.005
290	226	.026	.033	.209	-.096
290	230	.031	.026	.139	-.089
290	232	.068	.033	.202	-.044
290	233	.063	.039	.243	-.045
290	234	.022	.037	.148	-.142
290	235	-.123	.095	.084	-.680
290	236	.043	.031	.175	-.066
290	239	-.089	.062	.115	-.334
290	246	.061	.038	.229	-.118
290	251	.022	.030	.191	-.104
290	252	.031	.030	.150	-.137
290	253	.028	.039	.195	-.168
290	255	-.134	.085	.072	-.524
290	257	-.060	.041	.022	-.348
300	101	-.264	.078	-.105	-.638
300	102	-.219	.030	-.135	-.343
300	103	-.342	.107	-.065	-.792
300	104	-.281	.047	-.159	-.435
300	105	-.152	.039	-.026	-.333
300	106	-.069	.033	.033	-.276
300	107	-.219	.040	-.114	-.337
300	108	-.291	.064	-.134	-.550
300	109	-.177	.037	-.048	-.300
300	110	-.095	.055	.128	-.416
300	111	-.318	.056	-.193	-.531
300	112	-.244	.045	-.129	-.402
300	113	-.222	.094	.000	-.729
300	114	-.445	.082	-.254	-.811
300	115	-.356	.073	-.184	-.629
300	116	-.410	.091	-.147	-.913
300	117	.003	.041	.206	-.232
300	118	-.388	.077	-.170	-.692
300	119	-.383	.092	-.095	-.842
300	120	-.190	.093	.027	-.618
300	121	-.474	.096	-.206	-.902
300	122	-.516	.101	-.252	-.894
300	123	-.123	.039	-.007	-.275
300	124	-.400	.082	-.170	-.718
300	125	-.560	.103	-.292	-.923
300	126	-.441	.107	-.164	-1.175
300	127	.033	.048	.208	-.099
300	128	.007	.043	.190	-.131
300	129	-.057	.055	.159	-.267
300	130	.017	.077	.294	-.283

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
300	131	-.469	.109	-.178	-1.048
300	132	-.229	.065	-.022	-.460
300	133	-.374	.088	-.189	-.865
300	134	-.035	.042	.096	-.211
300	135	.122	.052	.302	-.029
300	136	-.279	.070	-.042	-.606
300	137	-.398	.071	-.206	-.713
300	138	.114	.060	.351	-.061
300	139	.118	.062	.328	-.073
300	140	.101	.058	.316	-.065
300	141	-.333	.079	-.115	-.639
300	142	-.265	.046	-.121	-.426
300	143	-.082	.037	.047	-.216
300	144	.124	.057	.313	-.029
300	145	.115	.060	.313	-.058
300	146	-.170	.044	-.020	-.347
300	147	.133	.060	.361	-.011
300	148	.042	.047	.200	-.124
300	149	-.022	.032	.097	-.121
300	150	.111	.053	.290	-.015
300	151	-.006	.070	.175	-.330
300	152	-.040	.027	.088	-.145
300	153	.054	.039	.222	-.056
300	154	.101	.053	.318	-.028
300	155	.154	.055	.345	-.017
300	156	.076	.043	.251	-.173
300	157	.061	.037	.191	-.046
300	201	.017	.027	.171	-.096
300	203	.091	.039	.253	-.050
300	204	.095	.037	.288	-.063
300	205	.085	.030	.206	.007
300	206	.078	.027	.178	-.007
300	209	.035	.053	.187	-.271
300	212	.052	.045	.210	-.128
300	213	.102	.032	.234	.017
300	226	.046	.050	.345	-.108
300	230	.052	.032	.218	-.048
300	232	.086	.032	.250	-.012
300	233	.106	.048	.386	-.004
300	234	.058	.037	.252	-.084
300	235	-.085	.086	.136	-.569
300	236	.078	.035	.225	-.012
300	239	-.053	.064	.144	-.391
300	246	.106	.041	.260	-.069
300	251	.041	.035	.172	-.145
300	252	.040	.030	.168	-.121
300	253	.032	.038	.136	-.233
300	255	-.102	.088	.079	-.447
300	257	-.057	.034	.036	-.206
310	101	-.204	.060	-.050	-.512
310	102	-.227	.034	-.129	-.376
310	103	-.382	.114	-.021	-.912
310	104	-.296	.052	-.146	-.507
310	105	-.163	.055	.016	-.478
310	106	-.095	.038	.025	-.310
310	107	-.240	.040	-.111	-.388
310	108	-.282	.063	-.094	-.533
310	109	-.222	.040	-.076	-.379
310	110	-.121	.056	.062	-.374
310	111	-.359	.061	-.227	-.589
310	112	-.315	.052	-.194	-.507
310	113	-.246	.085	-.038	-.668
310	114	-.489	.096	-.253	-.840
310	115	-.417	.084	-.232	-.708
310	116	-.454	.111	-.153	-.959
310	117	-.063	.033	.056	-.166
310	118	-.467	.101	-.222	-.801
310	119	-.410	.120	-.101	-.975
310	120	-.236	.096	.010	-.649
310	121	-.530	.118	-.220	-1.128
310	122	-.578	.114	-.304	-1.051
310	123	-.198	.045	-.049	-.364
310	124	-.464	.107	-.197	-1.076
310	125	-.626	.121	-.318	-1.095
310	126	-.524	.141	-.237	-1.346
310	127	-.024	.039	.137	-.183
310	128	-.061	.038	.089	-.230
310	129	-.177	.062	.001	-.439
310	130	-.120	.077	.138	-.468
310	131	-.506	.097	-.222	-.916
310	132	-.305	.072	-.040	-.547
310	133	-.422	.109	-.200	-1.023
310	134	-.133	.044	.005	-.332
310	135	.088	.042	.256	-.094
310	136	-.180	.065	.003	-.435
310	137	-.463	.084	-.243	-.775
310	138	.114	.064	.337	-.090
310	139	.076	.055	.275	-.103
310	140	.116	.057	.345	-.036
310	141	-.236	.065	-.067	-.459
310	142	-.300	.050	-.125	-.479
310	143	-.148	.040	-.007	-.327
310	144	.109	.051	.269	-.048
310	145	.072	.055	.246	-.081
310	146	-.089	.042	.055	-.255
310	147	.117	.056	.324	-.020
310	148	.094	.051	.303	-.070
310	149	-.039	.036	.118	-.158
310	150	.103	.056	.311	-.025
310	151	.015	.092	.273	-.340
310	152	.011	.040	.168	-.170
310	153	.114	.047	.297	-.009
310	154	.115	.060	.359	-.028
310	155	.145	.059	.340	-.002
310	156	.117	.054	.327	-.038
310	157	.068	.036	.215	-.018
310	201	.027	.031	.180	-.073
310	203	.125	.048	.332	-.016
310	204	.118	.039	.292	.007
310	205	.109	.035	.269	.019
310	206	.087	.030	.202	.008
310	209	.094	.039	.248	-.081
310	212	.098	.037	.249	-.110
310	213	.119	.034	.233	.017
310	226	.105	.060	.346	-.130
310	230	.088	.038	.238	-.019
310	232	.100	.037	.253	-.032
310	233	.150	.063	.451	.012
310	234	.119	.040	.278	-.005
310	235	-.046	.076	.138	-.537
310	236	.109	.038	.268	.013
310	239	-.025	.074	.172	-.468
310	246	.132	.042	.275	.030
310	251	.055	.041	.169	-.196
310	252	.053	.037	.209	-.135
310	253	.002	.068	.159	-.469
310	255	-.025	.060	.098	-.471
310	257	-.050	.041	.062	-.232
320	101	-.146	.043	-.042	-.490
320	102	-.213	.036	-.074	-.338
320	103	-.332	.095	-.134	-.762
320	104	-.281	.053	-.087	-.512
320	105	-.191	.078	.014	-.680
320	106	-.122	.047	.060	-.380
320	107	-.258	.041	-.140	-.418
320	108	-.289	.080	-.041	-.613
320	109	-.259	.042	-.112	-.458
320	110	-.151	.068	.029	-.538
320	111	-.362	.056	-.214	-.569
320	112	-.354	.056	-.193	-.519
320	113	-.276	.091	-.038	-.707
320	114	-.484	.091	-.252	-.843
320	115	-.424	.076	-.241	-.711
320	116	-.455	.120	-.124	-.970
320	117	-.120	.028	-.029	-.363
320	118	-.514	.108	-.274	-.861
320	119	-.447	.151	-.067	-1.109
320	120	-.318	.103	-.062	-.789
320	121	-.598	.142	-.269	-1.204
320	122	-.572	.126	-.284	-1.005

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
320	123	-.266	.053	-.129	-.448
320	124	-.534	.134	-.155	-1.198
320	125	-.660	.121	-.380	-1.083
320	126	-.584	.156	-.276	-1.604
320	127	-.083	.035	.072	-.224
320	128	-.134	.040	.026	-.290
320	129	-.306	.075	-.097	-.554
320	130	-.290	.083	-.023	-.623
320	131	-.575	.106	-.266	-.924
320	132	-.431	.085	-.186	-.735
320	133	-.462	.102	-.212	-.901
320	134	-.236	.059	-.072	-.472
320	135	.050	.039	.184	-.141
320	136	-.068	.058	.132	-.295
320	137	-.523	.091	-.294	-.861
320	138	.076	.062	.270	-.127
320	139	.017	.045	.224	-.080
320	140	.099	.062	.342	-.064
320	141	-.147	.056	.048	-.329
320	142	-.355	.058	-.180	-.538
320	143	-.217	.044	-.090	-.348
320	144	.037	.049	.196	-.131
320	145	.028	.048	.189	-.131
320	146	-.016	.045	.172	-.151
320	147	.091	.053	.319	-.042
320	148	.121	.058	.330	-.014
320	149	-.063	.039	.117	-.180
320	150	.088	.051	.285	-.045
320	151	.041	.101	.306	-.351
320	152	.068	.056	.301	-.206
320	153	.169	.060	.421	-.036
320	154	.125	.060	.362	-.041
320	155	.118	.049	.274	-.022
320	156	.129	.062	.397	-.179
320	157	.078	.035	.216	-.063
320	201	.035	.031	.157	-.083
320	203	.119	.054	.300	-.047
320	204	.139	.048	.334	.025
320	205	.124	.038	.255	.019
320	206	.095	.035	.289	-.002
320	209	.110	.038	.293	-.031
320	212	.127	.043	.324	.025
320	213	.144	.042	.319	.036
320	226	.140	.062	.386	-.050
320	230	.112	.043	.267	.009
320	232	.125	.044	.362	-.032
320	233	.193	.074	.491	.043
320	234	.142	.043	.311	.010
320	235	-.007	.059	.137	-.275
320	236	.126	.044	.272	.017

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
320	239	.043	.051	.168	-.338
320	246	.131	.044	.294	-.034
320	251	.060	.060	.241	-.304
320	252	.061	.043	.206	-.171
320	253	-.032	.078	.161	-.485
320	255	.016	.037	.135	-.164
320	257	-.033	.041	.092	-.414
330	101	-.124	.032	-.030	-.496
330	102	-.193	.041	-.072	-.415
330	103	-.295	.072	-.123	-.747
330	104	-.260	.061	-.067	-.767
330	105	-.224	.095	.034	-.728
330	106	-.143	.060	.038	-.446
330	107	-.268	.043	-.142	-.445
330	108	-.297	.106	-.038	-.800
330	109	-.279	.046	-.108	-.481
330	110	-.187	.093	.043	-.746
330	111	-.368	.062	-.213	-.573
330	112	-.364	.067	-.208	-.563
330	113	-.310	.111	-.021	-.807
330	114	-.495	.104	-.239	-.936
330	115	-.436	.084	-.256	-.714
330	116	-.486	.148	-.120	-1.252
330	117	-.153	.027	-.057	-.279
330	118	-.544	.101	-.299	-.925
330	119	-.466	.147	-.067	-1.082
330	120	-.416	.111	-.094	-.811
330	121	-.607	.143	-.269	-1.286
330	122	-.574	.113	-.304	-1.014
330	123	-.297	.053	-.158	-.502
330	124	-.540	.147	-.210	-1.315
330	125	-.653	.122	-.364	-1.151
330	126	-.579	.151	-.266	-1.484
330	127	-.153	.035	-.011	-.290
330	128	-.216	.046	-.084	-.400
330	129	-.441	.090	-.202	-.756
330	130	-.437	.104	-.173	-.796
330	131	-.584	.110	-.313	-1.035
330	132	-.520	.101	-.243	-.887
330	133	-.464	.111	-.205	-1.049
330	134	-.324	.066	-.148	-.609
330	135	.005	.052	.165	-.229
330	136	.022	.064	.211	-.248
330	137	-.537	.096	-.304	-.932
330	138	.000	.063	.205	-.207
330	139	-.041	.040	.079	-.203
330	140	.032	.057	.243	-.169
330	141	-.063	.055	.115	-.251
330	142	-.386	.061	-.226	-.639
330	143	-.278	.047	-.129	-.429

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
330	144	-.040	.045	.098	-.171
330	145	-.027	.038	.123	-.188
330	146	.040	.050	.209	-.140
330	147	.038	.045	.198	-.110
330	148	.119	.060	.335	-.038
330	149	-.085	.039	.082	-.215
330	150	.042	.051	.206	-.108
330	151	.060	.115	.358	-.536
330	152	.106	.070	.356	-.260
330	153	.190	.072	.457	-.010
330	154	.101	.064	.322	-.068
330	155	.085	.040	.226	-.035
330	156	.117	.064	.374	-.111
330	157	.069	.032	.189	-.041
330	201	.036	.034	.166	-.126
330	203	.087	.058	.277	-.090
330	204	.144	.048	.332	.027
330	205	.134	.041	.291	.014
330	206	.113	.049	.334	-.007
330	209	.108	.042	.276	-.014
330	212	.137	.049	.317	.015
330	213	.169	.051	.417	.022
330	226	.148	.062	.384	-.040
330	230	.119	.041	.286	-.014
330	232	.122	.048	.376	-.079
330	233	.198	.078	.598	.036
330	234	.154	.042	.299	.025
330	235	.022	.058	.143	-.290
330	236	.143	.049	.329	-.010
330	239	.078	.033	.195	-.096
330	246	.110	.038	.267	-.067
330	251	.057	.080	.236	-.393
330	252	.066	.057	.257	-.220
330	253	-.000	.075	.200	-.369
330	255	.036	.032	.131	-.111
330	257	-.017	.037	.088	-.186
340	101	-.139	.045	.005	-.495
340	102	-.213	.068	-.037	-.619
340	103	-.340	.116	-.115	-.960
340	104	-.279	.088	-.064	-.826
340	105	-.256	.091	-.011	-.658
340	106	-.173	.077	.008	-.569
340	107	-.256	.042	-.137	-.502
340	108	-.343	.136	-.005	-1.128
340	109	-.280	.047	-.145	-.462
340	110	-.234	.104	.059	-.709
340	111	-.374	.062	-.148	-.673
340	112	-.388	.062	-.234	-.601
340	113	-.321	.127	-.014	-.934
340	114	-.515	.115	-.160	-.966

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
340	115	-.450	.082	-.163	-.753
340	116	-.524	.148	-.154	-1.331
340	117	-.179	.031	-.097	-.319
340	118	-.529	.100	-.274	-.926
340	119	-.498	.149	-.053	-1.279
340	120	-.460	.118	-.145	-.955
340	121	-.585	.130	-.281	-1.205
340	122	-.552	.110	-.209	-.952
340	123	-.320	.053	-.180	-.487
340	124	-.521	.145	-.168	-1.357
340	125	-.622	.122	-.306	-1.067
340	126	-.551	.133	-.286	-1.370
340	127	-.208	.041	-.095	-.393
340	128	-.281	.056	-.132	-.553
340	129	-.525	.104	-.259	-.984
340	130	-.555	.113	-.290	-.950
340	131	-.613	.106	-.334	-1.023
340	132	-.557	.097	-.301	-.955
340	133	-.442	.106	-.187	-1.003
340	134	-.394	.079	-.221	-.614
340	135	-.051	.060	.108	-.330
340	136	.073	.060	.383	-.107
340	137	-.496	.087	-.281	-.825
340	138	-.101	.064	.093	-.331
340	139	-.115	.037	.024	-.282
340	140	-.034	.058	.152	-.229
340	141	.019	.055	.208	-.176
340	142	-.396	.064	-.224	-.628
340	143	-.323	.052	-.175	-.522
340	144	-.130	.050	.033	-.349
340	145	-.080	.035	.015	-.321
340	146	.077	.054	.274	-.054
340	147	-.019	.037	.115	-.132
340	148	.087	.060	.307	-.072
340	149	-.093	.038	.075	-.196
340	150	-.032	.042	.131	-.216
340	151	.084	.124	.453	-.507
340	152	.131	.089	.428	-.345
340	153	.182	.075	.453	-.026
340	154	.047	.052	.270	-.117
340	155	.047	.034	.192	-.054
340	156	.102	.069	.345	-.190
340	157	.051	.030	.166	-.046
340	201	.039	.040	.271	-.170
340	203	.070	.061	.304	-.111
340	204	.161	.053	.369	.015
340	205	.154	.046	.373	.038
340	206	.127	.054	.396	-.042

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
340	209	.084	.044	.252	-.107
340	212	.154	.050	.349	.025
340	213	.183	.059	.444	.036
340	226	.124	.053	.369	-.037
340	230	.100	.036	.254	.002
340	232	.127	.052	.325	-.103
340	233	.139	.054	.387	.015
340	234	.159	.049	.335	.000
340	235	.048	.035	.166	-.206
340	236	.115	.035	.266	-.022
340	239	.096	.031	.199	-.019
340	246	.101	.040	.244	-.056
340	251	.049	.092	.252	-.464
340	252	.067	.076	.291	-.465
340	253	.042	.071	.261	-.341
340	255	.055	.027	.145	-.051
340	257	-.014	.046	.100	-.487
350	101	-.166	.057	-.019	-.518
350	102	-.209	.074	-.022	-.655
350	103	-.441	.140	-.145	-1.077
350	104	-.292	.123	-.009	-1.254
350	105	-.254	.091	.014	-.663
350	106	-.196	.072	-.005	-.567
350	107	-.241	.037	-.135	-.396
350	108	-.338	.127	-.034	-1.092
350	109	-.283	.045	-.145	-.459
350	110	-.268	.095	.071	-.726
350	111	-.338	.062	-.146	-.640
350	112	-.360	.061	-.176	-.620
350	113	-.333	.123	.003	-.910
350	114	-.481	.128	-.093	-1.195
350	115	-.407	.079	-.181	-.740
350	116	-.476	.108	-.195	-1.057
350	117	-.204	.031	-.124	-.324
350	118	-.502	.104	-.241	-.901
350	119	-.509	.149	-.089	-1.080
350	120	-.496	.114	-.141	-.926
350	121	-.557	.104	-.287	-1.046
350	122	-.522	.118	-.157	-1.033
350	123	-.340	.052	-.203	-.537
350	124	-.508	.131	-.181	-1.103
350	125	-.573	.131	-.219	-1.169
350	126	-.529	.114	-.291	-1.206
350	127	-.251	.046	-.129	-.428
350	128	-.330	.064	-.180	-.538
350	129	-.570	.112	-.304	-.948
350	130	-.605	.115	-.333	-1.201
350	131	-.655	.123	-.346	-1.157

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
350	132	-.615	.117	-.314	-1.073
350	133	-.467	.124	-.153	-.993
350	134	-.440	.078	-.240	-.743
350	135	-.138	.069	.065	-.470
350	136	.098	.065	.325	-.101
350	137	-.443	.070	-.257	-.685
350	138	-.229	.073	.000	-.515
350	139	-.178	.035	-.078	-.328
350	140	-.143	.061	.087	-.386
350	141	.051	.061	.272	-.133
350	142	-.373	.055	-.188	-.608
350	143	-.347	.053	-.208	-.583
350	144	-.219	.054	-.022	-.423
350	145	-.130	.030	.025	-.257
350	146	.077	.059	.288	-.076
350	147	-.080	.032	.021	-.246
350	148	.032	.054	.226	-.122
350	149	-.101	.037	.034	-.232
350	150	-.102	.041	.058	-.272
350	151	.097	.124	.440	-.320
350	152	.148	.089	.424	-.210
350	153	.149	.073	.383	-.047
350	154	-.008	.051	.181	-.178
350	155	-.006	.026	.087	-.111
350	156	.067	.063	.319	-.274
350	157	.032	.028	.158	-.070
350	201	.025	.041	.314	-.176
350	203	.031	.063	.234	-.167
350	204	.157	.055	.395	.002
350	205	.165	.054	.399	.024
350	206	.123	.050	.332	-.007
350	209	.070	.045	.237	-.126
350	212	.137	.053	.358	-.000
350	213	.193	.070	.500	.040
350	226	.116	.049	.405	-.032
350	230	.103	.038	.268	-.007
350	232	.152	.056	.366	-.061
350	233	.112	.038	.276	-.028
350	234	.154	.042	.302	.015
350	235	.049	.025	.154	-.059
350	236	.124	.038	.285	.003
350	239	.098	.033	.233	-.041
350	246	.098	.043	.287	-.142
350	251	.030	.094	.279	-.474
350	252	.053	.078	.285	-.363
350	253	.044	.086	.253	-.483
350	255	.064	.026	.160	-.037
350	257	-.038	.076	.081	-.549

APPENDIX B

PRESSURE DIFFERENCE MAXIMA

Note: Appendix B is described in Section 4.5.

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 101-201

WD	MAX	MIN
350	.101	-.338
340	.064	-.599
330	.052	-.297
320	.012	-.277
310	.013	-.255
300	.003	-.259
290	.359	-.545
280	.170	-.417
270	.587	-.332
260	.848	-.179
250	.830	-.076
240	.915	-.054
230	.829	.062
220	1.224	.098
210	1.103	.084
200	1.641	.127
190	1.328	.103
180	1.175	.156
170	.944	.081
160	.888	.032
150	.747	.020
140	.687	-.024
130	.611	-.070
120	.397	-.092
110	.474	-.153
100	.473	-.222
90	.089	-.272
80	-.036	-.408
70	-.014	-.455
60	.049	-.332
50	.030	-.291
40	.044	-.255
30	.064	-.318
20	.098	-.455
10	.091	-.424
0	.032	-.332

MAX		MIN	
CP	WD	CP	WD
1.641	200	-.599	340

CONFIGURATION A

TAPS 103-203

WD	MAX	MIN
350	-.100	-.588
340	-.039	-.510
330	.059	-.445
320	.202	-.490
310	.194	-.476
300	.147	-.433
290	.754	-.198
280	.799	-.111
270	.824	-.053
260	.767	.032
250	.588	.052
240	.752	.062
230	.702	.081
220	.707	.081
210	.677	.074
200	.564	.032
190	.862	-.012
180	.911	-.014
170	.790	-.073
160	.502	-.095
150	.429	-.144
140	.256	-.309
130	.180	-.348
120	.066	-.412
110	-.010	-.415
100	-.015	-.296
90	.007	-.306
80	.068	-.186
70	.124	-.080
60	.180	-.069
50	.171	-.081
40	.150	-.194
30	.154	-.259
20	.152	-.289
10	.071	-.484
0	0.000	-.530

MAX		MIN	
CP	WD	CP	WD
.911	180	-.588	350

CONFIGURATION A

TAPS 104-204

WD	MAX	MIN
350	0.000	-.770
340	-.002	-.803
330	.049	-.873
320	.017	-1.049
310	.057	-.818
300	.022	-.778
290	-.051	-.278
280	-.061	-.293
270	-.063	-.323
260	-.100	-.382
250	-.078	-.420
240	-.012	-.347
230	.066	-.365
220	.188	-.233
210	.471	-.197
200	.619	-.085
190	.822	0.000
180	.964	.052
170	1.063	.061
160	.884	.112
150	.971	.064
140	.907	.113
130	1.180	-.014
120	1.039	-.065
110	.745	-.096
100	.250	-.274
90	.101	-.343
80	.047	-.420
70	.047	-.479
60	.015	-.629
50	-.145	-.702
40	-.169	-.663
30	-.147	-.750
20	-.098	-1.226
10	-.066	-1.300
0	-.012	-1.173

MAX		MIN	
CP	WD	CP	WD
1.180	130	-1.300	10

CONFIGURATION A

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 105-205

WD	MAX	MIN
350	.084	-1.263
340	.047	-.881
330	.035	-.721
320	.013	-.779
310	.049	-.636
300	-.002	-.694
290	.005	-.278
280	-.022	-.253
270	.022	-.225
260	.071	-.205
250	.179	-.161
240	.459	-.108
230	.427	-.053
220	.541	-.029
210	.654	-.041
200	.705	.059
190	.844	.103
180	1.151	.094
170	1.063	.103
160	.906	.017
150	.949	.020
140	.816	-.029
130	.660	-.019
120	.593	-.141
110	.352	-.133
100	.203	-.221
90	.083	-.228
80	.027	-.327
70	.027	-.355
60	.012	-.514
50	.012	-.767
40	-.012	-.960
30	.007	-.868
20	-.032	-.688
10	-.025	-.645
0	.012	-.823

MAX		MIN	
CP	WD	CP	WD
1.151	180	-1.263	350

CONFIGURATION A

TAPS 106-206

WD	MAX	MIN
350	.047	-.693
340	.049	-.639
330	.032	-.579
320	.035	-.382
310	.052	-.433
300	.074	-.325
290	.034	-.244
280	.030	-.215
270	.135	-.129
260	.241	-.081
250	.310	-.064
240	.451	-.014
230	.529	-.007
220	.687	-.002
210	.755	.005
200	.760	.052
190	.787	.118
180	.853	.125
170	.921	.133
160	.946	.037
150	.712	.040
140	.664	-.031
130	.554	-.031
120	.490	-.027
110	.357	-.071
100	.184	-.090
90	.035	-.108
80	.057	-.177
70	.018	-.301
60	.084	-.297
50	.067	-.337
40	.008	-.366
30	.059	-.464
20	.020	-.671
10	-.014	-.782
0	.005	-1.007

MAX		MIN	
CP	WD	CP	WD
.946	160	-1.007	0

CONFIGURATION A

TAPS 109-209

WD	MAX	MIN
350	.076	-.313
340	.160	-.359
330	.199	-.655
320	.237	-.644
310	.218	-.560
300	.211	-.474
290	.152	-.166
280	.093	-.132
270	.057	-.178
260	.027	-.262
250	-.022	-.307
240	-.009	-.304
230	.042	-.369
220	.113	-.328
210	.189	-.313
200	.342	-.215
190	.481	-.164
180	.648	-.095
170	.693	-.024
160	.686	.032
150	.719	.082
140	.689	.071
130	.890	.144
120	1.014	.119
110	1.036	.083
100	1.022	.061
90	.919	-.020
80	.758	-.052
70	.669	-.153
60	.425	-.228
50	.330	-.402
40	.002	-.379
30	-.066	-.396
20	-.127	-.424
10	-.101	-.399
0	.078	-.312

MAX		MIN	
CP	WD	CP	WD
1.036	110	-.655	330

CONFIGURATION A

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 112-212

WD	MAX	MIN
350	-.046	-.740
340	.079	-.766
330	.035	-.952
320	.100	-.733
310	.094	-.719
300	.101	-.757
290	.037	-.393
280	.039	-.245
270	.010	-.324
260	-.024	-.405
250	-.075	-.551
240	-.083	-.499
230	-.129	-.523
220	-.078	-.528
210	.070	-.505
200	.176	-.391
190	.290	-.294
180	.417	-.233
170	.645	-.244
160	.608	-.037
150	.771	-.002
140	.633	-.007
130	.586	.051
120	.744	.059
110	.845	.034
100	.698	.017
90	.641	-.104
80	.384	-.185
70	.309	-.320
60	.264	-.468
50	0.000	-.597
40	-.185	-.705
30	-.250	-.890
20	-.283	-.739
10	-.246	-.694
0	-.120	-.878

MAX		MIN	
CP	WD	CP	WD
.845	110	-.952	330

CONFIGURATION A

TAPS 113-213

WD	MAX	MIN
350	-.036	-1.151
340	-.027	-1.000
330	-.064	-1.169
320	-.080	-.926
310	-.105	-.795
300	-.107	-.774
290	.037	-.711
280	.013	-.755
270	.076	-.407
260	.023	-.346
250	.083	-.270
240	.054	-.244
230	.123	-.224
220	.316	-.186
210	.424	-.131
200	.504	-.156
190	.629	-.022
180	.547	-.024
170	.553	-.024
160	.491	.005
150	.532	-.039
140	.449	-.029
130	.479	.005
120	.303	-.034
110	.168	-.058
100	.160	-.290
90	.114	-.317
80	.117	-.342
70	.042	-.399
60	-.029	-.476
50	-.081	-.642
40	-.137	-.752
30	-.103	-.810
20	-.055	-.920
10	-.047	-1.117
0	-.032	-1.036

MAX		MIN	
CP	WD	CP	WD
.629	190	-1.169	330

CONFIGURATION A

TAPS 126-226

WD	MAX	MIN
350	-.129	-.801
340	-.125	-.981
330	-.173	-1.025
320	-.238	-1.334
310	-.152	-1.175
300	-.180	-1.378
290	-.205	-1.124
280	-.132	-.941
270	-.134	-.815
260	-.175	-.811
250	-.218	-1.031
240	-.233	-.906
230	-.127	-.743
220	.057	-.512
210	.201	-.336
200	.340	-.146
190	.436	-.076
180	.532	-.034
170	.566	-.088
160	.504	-.063
150	.378	-.253
140	.187	-.341
130	0.000	-.512
120	-.049	-.541
110	-.103	-.624
100	-.115	-.577
90	-.130	-.649
80	-.132	-.585
70	-.103	-.722
60	-.108	-1.068
50	-.268	-1.524
40	-.288	-1.541
30	-.286	-1.441
20	-.288	-1.436
10	-.186	-1.071
0	-.152	-.840

MAX		MIN	
CP	WD	CP	WD
.566	170	-1.541	40

CONFIGURATION A

TAPS 130-230

WD	MAX	MIN
350	-.104	-.968
340	-.080	-.964
330	-.139	-.856
320	-.188	-1.084
310	-.213	-1.057
300	-.210	-1.052
290	-.200	-1.346
280	-.144	-1.037
270	-.134	-.936
260	-.141	-.908
250	-.208	-1.162
240	-.275	-1.392
230	-.212	-1.356
220	-.134	-1.182
210	-.068	-.730
200	0.000	-.535
190	.015	-.491
180	-.004	-.539
170	-.024	-.565
160	-.085	-.719
150	-.159	-.722
140	-.152	-.795
130	-.068	-.653
120	.086	-.477
110	.328	-.213
100	.403	-.066
90	.444	-.003
80	.450	-.037
70	.383	-.039
60	.296	-.205
50	.138	-.548
40	-.012	-.782
30	-.203	-1.015
20	-.271	-1.096
10	-.240	-.927
0	-.125	-.975

MAX		MIN	
CP	WD	CP	WD
.450	80	-1.392	240

CONFIGURATION A

TAPS 132-232

WD	MAX	MIN
350	-.140	-1.024
340	-.189	-.890
330	-.193	-.956
320	-.145	-.777
310	-.130	-.852
300	-.164	-.758
290	.054	-.614
280	.017	-.747
270	.037	-.570
260	.073	-.586
250	.071	-.774
240	.056	-.493
230	.008	-.513
220	-.076	-.698
210	.027	-.676
200	.052	-.683
190	-.002	-.628
180	.015	-.593
170	.101	-.570
160	.178	-.539
150	.066	-.620
140	-.046	-.615
130	-.034	-.548
120	.079	-.395
110	.061	-.552
100	.120	-.572
90	.102	-.486
80	.084	-.600
70	.099	-.573
60	0.000	-.527
50	-.100	-.638
40	-.151	-.800
30	-.268	-.852
20	-.220	-1.099
10	-.126	-.988
0	-.149	-1.122

MAX		MIN	
CP	WD	CP	WD
.178	160	-1.122	0

CONFIGURATION A

TAPS 133-233

WD	MAX	MIN
350	-.155	-.880
340	-.135	-1.185
330	-.276	-1.242
320	-.250	-1.320
310	-.270	-1.233
300	-.203	-1.263
290	-.169	-.690
280	-.111	-.610
270	-.102	-.458
260	-.082	-.537
250	-.085	-.707
240	-.141	-1.116
230	-.223	-1.021
220	-.208	-1.084
210	-.122	-.962
200	-.044	-.778
190	-.026	-.594
180	-.039	-.581
170	-.056	-.563
160	-.090	-.529
150	-.097	-.469
140	-.082	-.501
130	.078	-.524
120	.121	-.356
110	.222	-.223
100	.328	-.169
90	.311	-.231
80	.361	-.190
70	.180	-.300
60	.066	-.427
50	-.064	-.577
40	-.149	-.712
30	-.200	-.719
20	-.189	-.764
10	-.156	-.722
0	-.130	-.976

MAX		MIN	
CP	WD	CP	WD
.361	80	-1.320	320

CONFIGURATION A

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 134-234

WD	MAX	MIN
350	-.183	-.766
340	-.225	-.786
330	-.187	-.812
320	-.122	-.758
310	-.108	-.756
300	-.118	-.638
290	.405	-.100
280	.425	-.063
270	.605	0.000
260	.617	-.017
250	.512	-.007
240	.461	-.170
230	.203	-.290
220	-.007	-.430
210	-.031	-.468
200	-.044	-.504
190	-.037	-.492
180	.003	-.614
170	.012	-.599
160	.027	-.554
150	.034	-.588
140	.015	-.640
130	.049	-.651
120	-.058	-.856
110	-.051	-.775
100	-.029	-.602
90	-.036	-.493
80	-.068	-.619
70	-.051	-.872
60	-.029	-1.002
50	-.078	-.864
40	-.088	-.792
30	-.125	-.901
20	-.191	-.777
10	-.121	-.867
0	-.184	-.785

MAX		MIN	
CP	WD	CP	WD
.617	260	-1.002	60

CONFIGURATION A

TAPS 135-235

WD	MAX	MIN
350	.534	-.276
340	.516	-.239
330	.737	-.138
320	.592	-.078
310	.700	-.039
300	.584	-.044
290	1.252	.047
280	1.097	.079
270	1.242	.093
260	1.102	.089
250	1.045	.035
240	.943	.074
230	.971	.064
220	.930	.008
210	.785	-.036
200	.891	-.104
190	.969	-.176
180	.487	-.456
170	.155	-.439
160	.102	-.510
150	.093	-.392
140	.150	-.328
130	.104	-.195
120	.097	-.333
110	.091	-.365
100	.105	-.185
90	.100	-.128
80	.066	-.166
70	.064	-.341
60	.069	-.390
50	.052	-.204
40	.059	-.179
30	.034	-.276
20	.076	-.358
10	-.017	-.484
0	.096	-.426

MAX		MIN	
CP	WD	CP	WD
1.252	290	-.510	160

CONFIGURATION A

TAPS 136-236

WD	MAX	MIN
350	.383	-.083
340	.321	-.225
330	.221	-.340
320	.096	-.458
310	.027	-.408
300	.054	-.522
290	-.155	-.587
280	-.129	-.615
270	-.101	-.549
260	-.098	-.609
250	-.085	-.748
240	-.134	-.868
230	-.181	-1.039
220	-.231	-1.314
210	-.181	-1.048
200	-.090	-.667
190	-.017	-.575
180	-.005	-.519
170	-.041	-.426
160	-.044	-.575
150	-.087	-.647
140	-.137	-.841
130	-.249	-1.340
120	-.231	-1.244
110	-.223	-1.232
100	-.163	-1.097
90	-.168	-1.069
80	-.196	-.855
70	-.230	-.897
60	-.250	-1.039
50	-.173	-.862
40	-.108	-.673
30	.062	-.487
20	.158	-.310
10	.260	-.218
0	.327	-.175

MAX		MIN	
CP	WD	CP	WD
.383	350	-1.340	130

CONFIGURATION A

TAPS 139-239

WD	MAX	MIN
350	.145	-.603
340	.138	-.592
330	.008	-.543
320	-.058	-.516
310	0.000	-.514
300	-.073	-.539
290	.084	-.415
280	.054	-.367
270	.116	-.253
260	.104	-.279
250	.086	-.319
240	.150	-.477
230	.165	-.595
220	.207	-.642
210	.155	-.477
200	.110	-.537
190	.071	-.438
180	.020	-.494
170	-.058	-.475
160	-.095	-.469
150	-.017	-.476
140	.106	-.405
130	.354	-.339
120	.531	-.168
110	.651	-.113
100	.883	-.054
90	.816	.073
80	.750	.095
70	.813	-.027
60	.961	0.000
50	.986	-.034
40	.808	-.113
30	.396	-.273
20	.098	-.317
10	.064	-.351
0	.015	-.417

MAX		MIN	
CP	WD	CP	WD
.986	50	-.642	220

CONFIGURATION A

TAPS 146-246

WD	MAX	MIN
350	.539	-.078
340	.462	-.132
330	.394	-.231
320	.223	-.340
310	.200	-.308
300	.150	-.326
290	-.076	-.544
280	-.115	-.619
270	-.125	-.523
260	-.100	-.554
250	-.081	-.675
240	-.131	-.698
230	-.176	-.759
220	-.198	-.914
210	-.179	-1.028
200	-.132	-.809
190	-.081	-.777
180	-.010	-.546
170	-.012	-.531
160	-.044	-.847
150	-.083	-.807
140	-.122	-.988
130	-.202	-1.146
120	-.180	-.759
110	-.147	-.719
100	-.174	-.665
90	-.174	-.664
80	-.218	-.721
70	-.238	-.917
60	-.219	-.740
50	-.161	-.761
40	-.037	-.534
30	.200	-.436
20	.284	-.286
10	.379	-.196
0	.571	-.151

MAX		MIN	
CP	WD	CP	WD
.571	0	-1.146	130

CONFIGURATION A

TAPS 151-251

WD	MAX	MIN
350	1.114	-.182
340	.978	-.268
330	.682	-.288
320	.512	-.298
310	.583	-.288
300	.633	-.323
290	.359	-.225
280	.174	-.220
270	.106	-.283
260	.108	-.207
250	.126	-.189
240	.156	-.340
230	.098	-.236
220	.125	-.276
210	.138	-.488
200	.189	-.456
190	.136	-.473
180	.089	-.474
170	.078	-.519
160	.092	-.529
150	.069	-.537
140	.081	-.421
130	.102	-.263
120	.095	-.246
110	.086	-.223
100	.088	-.219
90	.118	-.280
80	.174	-.292
70	.278	-.209
60	.418	-.226
50	.519	-.311
40	.551	-.219
30	.843	-.309
20	.835	-.179
10	1.096	-.179
0	1.071	-.188

MAX		MIN	
CP	WD	CP	WD
1.114	350	-.537	150

CONFIGURATION A

TAPS 152-252

WD	MAX	MIN
350	.741	-.083
340	.653	-.063
330	.583	-.119
320	.454	-.115
310	.620	-.162
300	.484	-.102
290	.144	-.217
280	.071	-.256
270	.047	-.278
260	.066	-.360
250	.071	-.419
240	.052	-.483
230	.003	-.563
220	.025	-.569
210	.022	-.624
200	.049	-.556
190	.020	-.508
180	.044	-.650
170	.123	-.571
160	.132	-.562
150	.111	-.455
140	.078	-.433
130	-.005	-.381
120	.010	-.296
110	.013	-.228
100	-.002	-.448
90	-.017	-.423
80	.076	-.446
70	.180	-.338
60	.327	-.304
50	.428	-.454
40	.701	-.303
30	.572	-.240
20	.944	-.256
10	.767	-.134
0	.696	-.140

MAX		MIN	
CP	WD	CP	WD
.944	20	-.650	180

CONFIGURATION A

TAPS 153-253

WD	MAX	MIN
350	.754	-.066
340	1.089	.010
330	.911	.003
320	1.016	-.014
310	1.096	0.000
300	1.196	.037
290	.272	-.173
280	.313	-.222
270	.135	-.253
260	.059	-.350
250	.078	-.453
240	.025	-.466
230	-.082	-.614
220	-.100	-.539
210	-.073	-.619
200	-.007	-.737
190	.003	-.884
180	.042	-.679
170	.067	-.529
160	.032	-.523
150	.050	-.536
140	.042	-.691
130	.007	-.644
120	-.005	-.490
110	-.032	-.445
100	-.049	-.476
90	-.108	-.553
80	-.086	-.566
70	-.160	-.649
60	-.081	-.682
50	.061	-.623
40	.419	-.516
30	.439	-.402
20	.510	-.323
10	.962	-.203
0	.916	-.179

MAX		MIN	
CP	WD	CP	WD
1.196	300	-.884	190

CONFIGURATION A

TAPS 155-255

WD	MAX	MIN
350	.262	-.134
340	.392	-.066
330	.498	-.032
320	.608	.008
310	.644	.013
300	.646	.015
290	1.111	.044
280	1.036	.040
270	.911	.020
260	.724	-.044
250	.788	-.107
240	.563	-.149
230	.481	-.211
220	.323	-.215
210	.071	-.257
200	.047	-.309
190	-.022	-.287
180	.064	-.258
170	.010	-.344
160	.081	-.629
150	.162	-.817
140	.187	-.395
130	.117	-.350
120	.095	-.226
110	.054	-.171
100	.032	-.195
90	-.012	-.277
80	-.027	-.351
70	-.046	-.362
60	-.078	-.418
50	-.095	-.464
40	-.130	-.384
30	-.114	-.365
20	.013	-.347
10	.059	-.269
0	.125	-.215

MAX		MIN	
CP	WD	CP	WD
1.111	290	-.817	150

CONFIGURATION A

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 157-2572

WD	MAX	MIN
350	.832	-.149
340	.599	-.187
330	.484	-.217
320	.373	-.348
310	.386	-.299
300	.283	-.243
290	.057	-.347
280	.094	-.249
270	.086	-.232
260	.032	-.186
250	.084	-.112
240	.145	-.058
230	.140	-.068
220	.125	-.088
210	.130	-.144
200	.128	-.181
190	.096	-.272
180	.050	-.322
170	-.002	-.337
160	.091	-.286
150	.162	-.314
140	.295	-.314
130	.389	-.187
120	.525	-.146
110	.586	-.115
100	.974	-.115
90	.983	-.079
80	.794	-.017
70	.629	-.029
60	.423	-.054
50	.427	-.005
40	.510	.002
30	.534	-.015
20	.536	-.032
10	.760	-.081
0	.853	-.091

MAX		MIN	
CP	WD	CP	WD
.983	90	-.348	0

CONFIGURATION A

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 101-201

WD	MAX	MIN
0	-.013	-.518
10	-.056	-.492
20	-.018	-.585
30	-.025	-.491
40	-.016	-.466
50	-.025	-.440
60	-.050	-.442
70	-.081	-.464
80	-.078	-.424
90	.036	-.311
100	.172	-.218
110	.277	-.164
120	.329	-.208
130	.469	-.098
140	.505	-.061
150	.627	.014
160	.687	.019
170	.776	.063
180	1.017	.024
190	.937	.034
200	1.076	.095
210	.988	.116
220	.959	.106
230	.700	.068
240	.582	.027
250	.465	.020
260	.406	-.169
270	.346	-.340
280	.040	-.460
290	-.080	-.711
300	-.019	-.622
310	-.068	-.645
320	.024	-.453
330	-.014	-.417
340	-.022	-.592
350	.005	-.524

MAX		MIN	
CP	WD	CP	WD
1.076	200	-.711	290

CONFIGURATION B

TAPS 103-203

WD	MAX	MIN
0	-.037	-1.435
10	-.006	-.757
20	.033	-.352
30	.052	-.280
40	.072	-.376
50	.098	-.253
60	.072	-.171
70	.079	-.173
80	.030	-.189
90	-.007	-.283
100	.034	-.242
110	.039	-.335
120	.047	-.329
130	.076	-.296
140	.102	-.322
150	.162	-.292
160	.163	-.256
170	.230	-.256
180	.236	-.223
190	.376	-.126
200	.431	-.107
210	.586	.026
220	.730	.110
230	.855	.177
240	.931	.175
250	.778	.129
260	.741	.041
270	.602	-.172
280	.394	-.529
290	.228	-.835
300	-.037	-.953
310	-.183	-1.143
320	-.107	-1.127
330	-.147	-1.072
340	-.151	-1.252
350	-.087	-1.275

MAX		MIN	
CP	WD	CP	WD
.931	240	-1.435	0

CONFIGURATION B

TAPS 104-204

WD	MAX	MIN
0	-.123	-1.155
10	-.127	-1.212
20	-.175	-.904
30	-.190	-.838
40	-.206	-.785
50	-.225	-.817
60	-.203	-.744
70	-.135	-.630
80	-.003	-.550
90	.176	-.322
100	.517	-.202
110	.703	-.176
120	.710	.041
130	.665	.107
140	1.011	.145
150	.975	.122
160	.854	.109
170	.785	.100
180	.596	.085
190	.468	.061
200	.395	0.000
210	.313	-.081
220	.241	-.119
230	.127	-.200
240	.085	-.281
250	.017	-.315
260	-.061	-.351
270	-.076	-.304
280	-.061	-.380
290	-.063	-.364
300	-.055	-.463
310	-.057	-.660
320	-.082	-1.032
330	-.048	-1.041
340	-.115	-.995
350	-.097	-.998

MAX		MIN	
CP	WD	CP	WD
1.011	140	-1.212	10

CONFIGURATION B

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 105-205

WD	MAX	MIN
0	-.109	-1.097
10	-.131	-1.093
20	-.105	-.902
30	-.093	-1.046
40	.009	-.736
50	-.067	-.615
60	-.091	-.586
70	-.084	-.421
80	-.009	-.361
90	.119	-.288
100	.178	-.175
110	.271	-.228
120	.471	-.024
130	.521	.023
140	.576	.044
150	.620	.081
160	.606	.069
170	.766	.064
180	.665	.108
190	.799	.098
200	.769	.078
210	.628	.054
220	.475	.012
230	.418	-.047
240	.361	-.051
250	.293	-.120
260	.213	-.201
270	-.012	-.304
280	-.044	-.346
290	-.066	-.400
300	-.051	-.454
310	-.065	-.617
320	-.102	-.806
330	-.121	-1.128
340	-.125	-1.122
350	-.126	-1.472

MAX		MIN	
CP	WD	CP	WD
.799	190	-1.472	350

CONFIGURATION B

TAPS 106-206

WD	MAX	MIN
0	-.133	-.746
10	-.090	-.813
20	-.030	-.897
30	-.059	-.676
40	-.064	-.506
50	-.055	-.536
60	-.013	-.404
70	-.021	-.354
80	.036	-.203
90	.075	-.139
100	.216	-.095
110	.288	-.020
120	.541	-.010
130	.495	.024
140	.635	.056
150	.562	.068
160	.638	.121
170	.794	.075
180	.705	.121
190	.732	.106
200	.657	.131
210	.582	.041
220	.655	.059
230	.558	.042
240	.586	.010
250	.348	-.036
260	.248	-.093
270	.132	-.161
280	.012	-.215
290	0.000	-.277
300	0.000	-.334
310	-.039	-.442
320	-.034	-.510
330	-.050	-.763
340	-.061	-.722
350	-.117	-.931

MAX		MIN	
CP	WD	CP	WD
.794	170	-.931	350

CONFIGURATION B

TAPS 109-209

WD	MAX	MIN
0	-.124	-.551
10	-.150	-.622
20	-.137	-.701
30	-.148	-.604
40	-.168	-.643
50	.009	-.533
60	.232	-.435
70	.524	-.359
80	.638	-.134
90	.857	-.014
100	1.135	.069
110	1.288	.132
120	1.125	.190
130	.870	.157
140	.736	.100
150	.583	.059
160	.441	.034
170	.322	-.007
180	.410	-.072
190	.248	-.133
200	.186	-.192
210	.121	-.252
220	.149	-.276
230	.063	-.269
240	.017	-.248
250	.031	-.214
260	.042	-.241
270	.032	-.186
280	.065	-.215
290	.092	-.206
300	.075	-.252
310	.097	-.384
320	.080	-.861
330	.072	-.939
340	.010	-.443
350	-.024	-.443

MAX		MIN	
CP	WD	CP	WD
1.288	110	-.939	330

CONFIGURATION B

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 112-212

WD	MAX	MIN
0	-.192	-.847
10	-.280	-1.123
20	-.257	-.887
30	-.279	-.891
40	-.268	-.838
50	-.234	-.708
60	-.011	-.573
70	.170	-.399
80	.292	-.317
90	.570	-.066
100	.743	.053
110	1.000	.120
120	.908	.175
130	.760	.096
140	.614	.085
150	.500	.051
160	.322	-.061
170	.211	-.101
180	.143	-.203
190	.173	-.301
200	.085	-.296
210	.017	-.347
220	.052	-.357
230	-.012	-.351
240	.022	-.444
250	-.005	-.382
260	.020	-.384
270	-.007	-.257
280	.003	-.372
290	.027	-.427
300	.012	-.504
310	.010	-.630
320	.039	-.956
330	-.009	-.816
340	-.082	-.852
350	-.152	-.816

MAX		MIN	
CP	WD	CP	WD
1.000	110	-1.123	10

CONFIGURATION B

TAPS 113-213

WD	MAX	MIN
0	-.194	-1.180
10	-.178	-1.249
20	-.247	-1.186
30	-.216	-.970
40	-.168	-.915
50	-.113	-.674
60	-.062	-.650
70	.013	-.452
80	.073	-.338
90	.098	-.209
100	.127	-.092
110	.239	-.038
120	.291	-.012
130	.335	.034
140	.362	.025
150	.405	.035
160	.388	.010
170	.413	.027
180	.400	.027
190	.358	-.017
200	.246	-.046
210	.260	-.051
220	.176	-.101
230	.167	-.128
240	.146	-.154
250	.221	-.246
260	.058	-.346
270	-.015	-.416
280	.029	-.665
290	-.041	-.797
300	-.056	-.809
310	-.124	-.828
320	-.150	-.981
330	-.159	-1.172
340	-.145	-1.429
350	-.150	-1.340

MAX		MIN	
CP	WD	CP	WD
.413	170	-1.429	340

CONFIGURATION B

TAPS 126-226

WD	MAX	MIN
0	-.345	-1.291
10	-.355	-1.385
20	-.323	-1.826
30	-.344	-1.609
40	-.316	-1.608
50	-.314	-1.562
60	-.191	-1.371
70	-.181	-.789
80	-.146	-.683
90	-.125	-.611
100	-.086	-.498
110	-.056	-.469
120	.068	-.479
130	.193	-.303
140	.312	-.104
150	.438	-.093
160	.498	.036
170	.569	.063
180	.540	.046
190	.468	-.039
200	.411	-.140
210	.274	-.225
220	.166	-.298
230	.049	-.500
240	-.097	-.550
250	-.153	-.785
260	-.180	-.807
270	-.143	-.958
280	-.131	-.912
290	-.177	-.979
300	-.164	-1.221
310	-.251	-1.674
320	-.280	-1.314
330	-.260	-1.288
340	-.295	-1.390
350	-.371	-1.511

MAX		MIN	
CP	WD	CP	WD
.569	170	-1.826	20

CONFIGURATION B

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 130-230

WD	MAX	MIN
0	-.386	-1.358
10	-.382	-1.257
20	-.311	-1.174
30	-.232	-1.125
40	-.112	-.913
50	.076	-.551
60	.225	-.319
70	.339	-.147
80	.511	-.019
90	.455	-.004
100	.379	-.068
110	.297	-.162
120	.105	-.381
130	.013	-.394
140	-.072	-.498
150	-.017	-.499
160	.025	-.437
170	.069	-.471
180	.106	-.406
190	.080	-.325
200	.086	-.503
210	.039	-.553
220	-.007	-.586
230	-.076	-.730
240	-.104	-.875
250	-.120	-.868
260	-.142	-.938
270	-.146	-.793
280	-.160	-.992
290	-.201	-1.185
300	-.193	-1.301
310	-.234	-1.467
320	-.237	-1.165
330	-.151	-1.381
340	-.305	-1.380
350	-.318	-1.567

MAX		MIN	
CP	WD	CP	WD
.511	80	-1.567	350

CONFIGURATION B

TAPS 132-232

WD	MAX	MIN
0	-.436	-1.270
10	-.442	-1.513
20	-.450	-1.250
30	-.366	-1.291
40	-.289	-.946
50	-.112	-.726
60	-.028	-.565
70	.050	-.623
80	.109	-.561
90	.090	-.503
100	.116	-.518
110	.143	-.660
120	.104	-.302
130	.026	-.340
140	.009	-.450
150	-.020	-.494
160	.002	-.496
170	.048	-.529
180	.012	-.524
190	.022	-.508
200	.053	-.454
210	.036	-.426
220	.044	-.446
230	.042	-.364
240	095	-.492
250	.119	-.584
260	.112	-.593
270	.032	-.576
280	.019	-.771
290	-.002	-.637
300	-.056	-.626
310	-.130	-.797
320	-.229	-1.116
330	-.332	-1.086
340	-.347	-1.256
350	-.430	-1.350

MAX		MIN	
CP	WD	CP	WD
.143	110	-1.513	10

CONFIGURATION B

TAPS 133-233

WD	MAX	MIN
0	-.261	-1.102
10	-.301	-1.165
20	-.334	-1.088
30	-.264	-.940
40	-.208	-.851
50	-.052	-.600
60	.065	-.465
70	.159	-.285
80	.255	-.189
90	.276	-.221
100	.304	-.237
110	.263	-.177
120	.195	-.219
130	.071	-.303
140	-.009	-.403
150	-.019	-.464
160	.051	-.389
170	.069	-.365
180	.061	-.462
190	.054	-.432
200	.042	-.451
210	.026	-.468
220	-.012	-.454
230	-.047	-.594
240	-.025	-.717
250	-.046	-.519
260	-.056	-.494
270	-.108	-.496
280	-.138	-.571
290	-.182	-.764
300	-.262	-1.134
310	-.285	-1.235
320	-.280	-1.474
330	-.281	-1.523
340	-.277	-1.237
350	-.324	-1.343

MAX		MIN	
CP	WD	CP	WD
.304	100	-1.523	330

CONFIGURATION B

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 134-234

WD	MAX	MIN
0	-.337	-1.010
10	-.366	-1.118
20	-.305	-.986
30	-.285	-.989
40	-.193	-.945
50	-.124	-.894
60	-.079	-.937
70	-.050	-.867
80	-.049	-.700
90	-.015	-.365
100	-.005	-.513
110	.078	-.608
120	.046	-.890
130	.073	-.800
140	.082	-.669
150	.097	-.437
160	.155	-.467
170	.088	-.510
180	.139	-.444
190	.046	-.456
200	-.013	-.455
210	.083	-.326
220	.145	-.215
230	.311	-.184
240	.445	-.024
250	.551	-.012
260	.681	.039
270	.615	.012
280	.490	-.036
290	.273	-.207
300	.146	-.337
310	-.010	-.525
320	-.157	-.692
330	-.223	-.870
340	-.285	-.955
350	-.327	-.956

MAX		MIN	
CP	WD	CP	WD
.681	260	-1.118	10

CONFIGURATION B

TAPS 135-235

WD	MAX	MIN
0	-.032	-.628
10	-.047	-.692
20	-.020	-.506
30	.009	-.287
40	.050	-.247
50	.047	-.206
60	.084	-.251
70	.084	-.296
80	.076	-.197
90	.076	-.114
100	.101	-.319
110	.130	-.204
120	.129	-.218
130	.132	-.209
140	.209	-.250
150	.127	-.300
160	.158	-.338
170	.214	-.372
180	.554	-.231
190	.580	-.129
200	.619	-.051
210	.762	-.007
220	.676	-.030
230	1.144	.046
240	1.060	.107
250	1.038	.099
260	1.111	.034
270	1.195	.113
280	1.050	.063
290	1.028	-.083
300	.962	-.090
310	.746	-.131
320	.440	-.293
330	.366	-.293
340	.254	-.406
350	.208	-.567

MAX		MIN	
CP	WD	CP	WD
1.195	270	-.692	10

CONFIGURATION B

TAPS 136-236

WD	MAX	MIN
0	.155	-.285
10	.134	-.319
20	.016	-.458
30	-.016	-.609
40	-.138	-.768
50	-.221	-.864
60	-.233	-.991
70	-.230	-.942
80	-.173	-.883
90	-.162	-.887
100	-.119	-.880
110	-.066	-.931
120	-.096	-.707
130	-.047	-.605
140	-.061	-.484
150	.041	-.460
160	.070	-.339
170	.131	-.389
180	.114	-.422
190	.102	-.344
200	.061	-.428
210	.034	-.573
220	-.024	-.552
230	-.010	-.608
240	-.034	-.632
250	-.034	-.544
260	-.049	-.584
270	-.097	-.527
280	-.164	-.662
290	-.182	-.673
300	-.155	-.684
310	-.048	-.703
320	.012	-.486
330	.125	-.361
340	.205	-.306
350	.257	-.256

MAX		MIN	
CP	WD	CP	WD
.257	350	-.991	60

CONFIGURATION B

TAPS 139-239

WD	MAX	MIN
0	-.160	-.525
10	-.056	-.507
20	-.028	-.415
30	.190	-.312
40	.529	-.206
50	.603	-.180
60	.718	-.107
70	.667	-.054
80	.815	-.004
90	.735	.051
100	.848	.051
110	.743	-.012
120	.621	-.110
130	.380	-.137
140	.217	-.255
150	.129	-.209
160	.054	-.265
170	.127	-.211
180	.122	-.229
190	.135	-.265
200	.184	-.283
210	.210	-.715
220	.272	-.713
230	.356	-.432
240	.193	-.315
250	.112	-.305
260	.134	-.266
270	.044	-.309
280	.046	-.346
290	.002	-.408
300	-.027	-.487
310	-.097	-.538
320	-.147	-.672
330	-.157	-.610
340	-.162	-.700
350	-.065	-.709

MAX		MIN	
CP	WD	CP	WD
.848	100	-.715	210

CONFIGURATION B

TAPS 146-246

WD	MAX	MIN
0	.300	-.329
10	.265	-.355
20	.128	-.497
30	.033	-.498
40	-.064	-.625
50	-.209	-.726
60	-.251	-.776
70	-.238	-.789
80	-.187	-.716
90	-.176	-.671
100	-.119	-.562
110	-.112	-.545
120	-.076	-.529
130	-.025	-.640
140	-.044	-.778
150	0.000	-.607
160	.038	-.614
170	.070	-.675
180	.087	-.368
190	.114	-.391
200	.024	-.516
210	.010	-.758
220	.025	-.749
230	.020	-.573
240	-.032	-.695
250	-.039	-.546
260	-.064	-.476
270	-.088	-.659
280	-.138	-.588
290	-.116	-.528
300	.003	-.554
310	.003	-.448
320	.090	-.425
330	.244	-.263
340	.322	-.217
350	.292	-.227

MAX		MIN	
CP	WD	CP	WD
.322	340	-.789	70

CONFIGURATION B

TAPS 151-251

WD	MAX	MIN
0	.804	-.570
10	.939	-.628
20	.900	-.608
30	.695	-.612
40	.587	-.499
50	.463	-.593
60	.249	-.416
70	.121	-.351
80	.170	-.390
90	.088	-.260
100	.085	-.249
110	.117	-.222
120	.136	-.206
130	.147	-.272
140	.144	-.436
150	.116	-.521
160	.177	-.564
170	.273	-.382
180	.280	-.425
190	.282	-.432
200	.171	-.447
210	.118	-.564
220	.166	-.447
230	.161	-.278
240	.186	-.253
250	.177	-.218
260	.147	-.194
270	.083	-.332
280	.118	-.373
290	.173	-.352
300	.324	-.431
310	.439	-.502
320	.517	-.583
330	.635	-.655
340	.816	-.602
350	.787	-.551

MAX		MIN	
CP	WD	CP	WD
.939	10	-.655	330

CONFIGURATION B

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 152-252

WD	MAX	MIN
0	.886	-.317
10	.746	-.509
20	.749	-.727
30	.614	-.782
40	.558	-.607
50	.545	-.680
60	.275	-.556
70	.088	-.569
80	-.020	-.589
90	-.022	-.434
100	.034	-.321
110	.077	-.187
120	.085	-.200
130	.122	-.237
140	.102	-.401
150	.091	-.377
160	.148	-.449
170	.168	-.395
180	.122	-.432
190	.097	-.423
200	.163	-.405
210	.027	-.467
220	.110	-.627
230	.059	-.563
240	.076	-.550
250	.121	-.462
260	.061	-.365
270	.047	-.313
280	.114	-.272
290	.106	-.236
300	.099	-.292
310	.302	-.350
320	.331	-.328
330	.463	-.408
340	.966	-.344
350	.875	-.526

MAX		MIN	
CP	WD	CP	WD
.966	340	-.782	30

CONFIGURATION B

TAPS 153-253

WD	MAX	MIN
0	.645	-.334
10	.616	-.447
20	.478	-.589
30	.352	-.743
40	.229	-.669
50	-.028	-.734
60	-.176	-.755
70	-.192	-.759
80	-.143	-.761
90	-.107	-.601
100	-.060	-.568
110	-.043	-.327
120	.013	-.345
130	.047	-.397
140	.059	-.375
150	.057	-.399
160	.105	-.312
170	.100	-.428
180	.115	-.648
190	.175	-.760
200	.130	-.641
210	.063	-.475
220	.036	-.451
230	.034	-.539
240	.066	-.521
250	.143	-.397
260	.112	-.406
270	.203	-.306
280	.257	-.262
290	.299	-.201
300	.374	-.143
310	.555	-.114
320	.716	-.157
330	.625	-.130
340	.708	-.200
350	.671	-.313

MAX		MIN	
CP	WD	CP	WD
.716	320	-.761	80

CONFIGURATION B

TAPS 155-255

WD	MAX	MIN
0	.001	-.254
10	.031	-.331
20	-.079	-.430
30	-.109	-.429
40	-.113	-.528
50	-.106	-.528
60	-.095	-.504
70	-.074	-.454
80	-.029	-.388
90	.002	-.287
100	.048	-.189
110	.136	-.144
120	.158	-.178
130	.182	-.237
140	.203	-.406
150	.179	-.634
160	.194	-.540
170	.156	-.311
180	.121	-.127
190	.272	-.243
200	.245	-.199
210	.297	-.196
220	.413	-.142
230	.453	-.163
240	.848	-.120
250	.708	-.036
260	.791	.022
270	.767	.012
280	.853	-.007
290	.768	-.026
300	1.082	.005
310	.701	-.059
320	.552	-.084
330	.384	-.097
340	.186	-.162
350	.082	-.208

MAX		MIN	
CP	WD	CP	WD
1.082	300	-.634	150

CONFIGURATION B

APPENDIX B -- PRESSURE DIFFERENCE MAXIMA

TAPS 157-257

WD	MAX	MIN
0	.625	-.206
10	.683	-.123
20	.714	-.091
30	.515	-.043
40	.385	-.018
50	.407	-.006
60	.396	-.054
70	.483	-.047
80	.669	-.048
90	.903	-.063
100	.568	-.029
110	.719	-.063
120	.546	-.143
130	.427	-.155
140	.365	-.193
150	.396	-.242
160	.341	-.333
170	.265	-.158
180	.241	-.175
190	.161	-.313
200	.255	-.313
210	.145	-.255
220	.146	-.157
230	.102	-.083
240	.091	-.079
250	.085	-.144
260	.037	-.178
270	.054	-.209
280	.072	-.302
290	.070	-.431
300	.055	-.447
310	.110	-.469
320	.366	-.456
330	.289	-.419
340	.490	-.283
350	.491	-.240

MAX		MIN	
CP	WD	CP	WD
.903	90	-.469	0

CONFIGURATION B