

FINITE ~~ELEMENT~~ MODELLING AND ANALYSES OF
BEAMS AND CONNECTIONS BY MSC/NASTRAN

by

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ABSTRACT

FINITE ELEMENT MODELLING AND ANALYSES OF BEAMS AND CONNECTIONS BY MSC/NASTRAN

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The objectives of this work were to demonstrate the capability of the finite element analysis program MSC/NASTRAN in modelling different kinds of stress analysis problems encountered in civil engineering discipline, and to compare and assess the accuracy of the results obtained by using different modelling options of the MSC/NASTRAN for the same problems.

The problems studied were :

1. the analyses of beam structures, which include
 - 1.1. a simple thin-walled curved beam,
 - 1.2. a continuous double-tee beam subjected to symmetrical and unsymmetrical uniformly distributed loading,
 - 1.3. a continuous horizontal curved beam subjected to out-of-plane loading,
2. the riveted connections, which include
 - 2.1. a butt joint ,
 - 2.2. a beam-to-column connection.

Different element options available in MSC/NASTRAN element library were used as models for each problem. The results ob-

tained from these types of analyses and from the experiments are also presented.

Good results were obtained **from** some finite element models when compared with the solutions from the theory and **the** experimental results. Some finite element models failed to give accurate results. From this investigation there is evidence that the finite element models provided in the **MSC/NASTRAN** should be selected with care to achieve good results from the finite element analyses. The users should have sufficient background in finite element theory in order to choose the proper finite element for the structures to be analyzed.

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LIST OF SYMBOLS

SYMBOL	DEFINITION
$\{a\}$	Generalized parameters of an approximation for interpolation function
A	Cross sectional area
B^m	Strain-displacement matrix
B	Polynomial basis over the element
C^m	Element elasticity matrix
E	Modulus of elasticity
f^b	Vector of body forces
f^s	Vector of surface tractions
f_x^b, f_y^b, f_z^b	Body force components
f_x^s, f_y^s, f_z^s	Surface force components
F^i	Vector of externally applied concentrated forces
Ft	foot
f_x^i, f_y^i, f_z^i	Externally applied concentrated force components
G	Shear modulus
$H^{(m)}$	Displacement interpolation matrix
$H^{s(m)}$	Surface displacement interpolation matrix
i	Node number
I	Yoment of inertia
	Stiffness matrix

SYMBOL	DEFINITION
KN	Kilo Newton
L	Length of the beam
L_C	Length along the curve of curved beams
m	Numbers of elements
mm	Millimeter
M	Total number of degree of freedom in the system
MPC	Multipoint constraints
P	Force
r, θ, z	Global cylindrical polar coordinates
R	Applied load vector
R_B	Body forces
R_C	Concentrated forces
R_I	Element initial stresses
R_S	Surface forces
$u, v, w,$	Displacement components
$u^{(m)}$	Local displacement
$\bar{u}, \bar{v}, \bar{w}$	Virtual displacement components
U	Displacement vector
\hat{U}	Vector of global displacement components of nodal points
\bar{U}	Virtual displacement vector
$\bar{U}^{(m)}$	Virtual surface displacement

SYMBOL	DEFINITION
\bar{U}	Identity matrix
V	Volume
α, β, γ	Angles for supports of curved beam in cylindrical coordinates
E	Strain vector
$E^{(m)}$	Element strains
E_{xx}, E_{yy}, E_{zz}	Normal strains along x , y , and z axes
\bar{E}	Virtual strain vector
$\bar{E}_{xx}, \bar{E}_{yy}, \bar{E}_{zz}$	Virtual normal strain component along x , y , and z axes
ϕ	Rotation about the axis along the Seam
ϕ''	Second dirivative of ϕ
ν	Poisson's ratio
ξ, η	Natural coordinate system of isoparametric element
$\alpha, \delta_{yz}, \delta_{zx}$	Shear strains in xy , yz , and zx planes
σ	Stress vector
$\sigma^{(m)}$	Element initial stresses
$\sigma^{(m)}$	Element stresses
$\sigma_{xx}, \sigma_{yy}, \sigma_{zz}$	Normal stresses along x , y , and z
τ	Shear vector
$\tau_{xy}, \tau_{yz}, \tau_{zx}$	Shear stresses in xy , yz , and zx planes
$\{ \}$	A rectangular or square matrix

SYMBOL

$\{ \}^{-1}$

$\{ \}^T$

$\{ \}^{-T}$

Σ

DEFINITION

Matrix inverse

Matrix transpose

Matrix inverse transpose

Summation of the mathematical terms
that follow

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INTRODUCTION

The finite element method (FEM) is a popular numerical technique used for determining the stresses, strains, and displacements in structures. A number of general purpose finite element computer programs, such as MSC/NASTRAN, ANSYS, ADINA, ABAQUS etc., are available for the solution of the problems in elasticity, plasticity, fluid flow, and so on. Most important to the success of a finite element analysis is the accuracy of the modeling technique utilized to develop the discretised model of the structure. Thus, the accuracy of the finite element results is a matter of primary concern to those who perform finite element analyses and to those who are responsible for conclusions derived therefrom.

The FEM has undergone an extremely active development period since its beginnings in the late 1950s. During the first six or seven years, the application of the FEM spread very slowly, and the research efforts concentrated mainly on new element development. A more significant preliminary to the development of the FEM was the matrix generalization of structural theory in which the analysis was formulated as a form of coordinate transformation. The classic work, which completely stated the

matrix formulation of the structural theory and which clearly outlined the parallel procedures of the force and displacement methods, was the series of articles first published in Aircraft Engineering by Argyris (1). It was this work which demonstrated that the concepts of matrix structural analysis are not restricted to the traditional truss and beam analysis only (1) and it can be generalized for application to assemblages of any type of structured elements.

The true finite element concept is concerned primarily with the discretization process, not with the procedure used to analyze the system after the discrete elements have been identified and evaluated. Specifically, the FEM discretization involves the assumption of strain or stress fields defined on a regional basis, rather than replacement of the actual continuum by a set of substituted elements. This general concept applies to well known approximation methods of continuum mechanics, such as the Rayleigh - Ritz method. The unique feature of the FEM is the idea of defining the strain field independently for the various regions or elements into which the continuum is divided.

Although this regional discretization concept had been proposed earlier, it was only when it was used by

Boeing Aircraft Company as a means of avoiding the difficulty of physical discretization by bar assemblages that the method really began to develop (1). Since 1965, advances in finite element methodology have been very rapid and diverse because of the availability of digital computers. More recently, there has been a natural trend towards work focussing on applications of the method.

One of the first tasks facing a potential user of the FEM is an appropriate selection of a suitable element. At this stage, one is confronted with a large number of elements that have resulted from over twenty years of research activity. In 1984, MacNeal and Harder (2,3) presented a proposed standard set of problems to test finite element accuracy. The intended purpose of the proposed problem set was to help users and developers of the finite element programs to ascertain the accuracy of particular finite elements in various applications. However, the problems solved by using MSC/NASTRAN are too small to be the references for the users and developers of the finite element programs.

The primary objective of this work is to demonstrate the capability of the finite element analysis program MSC/NASTRAN in modelling different kinds of stress

analysis problems encountered in the civil engineering" discipline. The problems are carefully chosen to observe the behavior of different elements available in the MSC/NASTRAN's element library. The other objective of this study is to compare and assess the accuracy of the results obtained by using different modelling options of MSC/NASTRAN for the same problem. This is done to develop a set of general guidelines for the selection of appropriate elements for various FE analysis applications;

In Chapter 1 a brief theory and mathematical formulation of the FEM is presented for the sake of completeness. Chapters 2 and 3 describe the exact geometry and the FE models of the simple thin-walled curved beam, the continuous beam, and the riveted connections respectively. A discussion of results along with a comparison with the theoretical and experimental results is also presented in these chapters. The concluding remarks with recommendations are discussed in Chapter 4. The sample input data for different finite element models are given in appendices.

CHAPTER 1

THEORY OF FINITE ELEMENT METHOD

The Finite Element Method (FEM) is a numerical procedure for solving continuum mechanics problems with an accuracy acceptable to engineers. In structures, the method can be understood as an extension of earlier established analysis techniques in which a structure is represented as an assemblage of discrete truss and beam elements (4). The same matrix algebra procedures are used, but instead of truss and beam members, finite elements are employed to represent the region of plane stress, plane strain, and axisymmetric, three-dimensional, plate, or shell behavior.

1.1 The Mathematical Formulation of FEY

For the equilibrium of a general three-dimensional body shown in Fig. 1.1, the external forces acting upon the body are surface traction, f^s , body forces, f^b , and concentrated forces, F^i , which in the rectangular coordinate system are

$$f^b = \begin{bmatrix} f_x^b \\ f_y^b \\ f_z^b \end{bmatrix} ; \quad f^s = \begin{bmatrix} f_x^s \\ f_y^s \\ f_z^s \end{bmatrix} ; \quad F^i = \begin{bmatrix} F_x^i \\ F_y^i \\ F_z^i \end{bmatrix} \quad (1.1)$$

The displacements of the body from the unloaded

configuration are denoted by \mathbf{U} , where

$$\mathbf{U} = [u \quad v \quad w] \quad (1.2)$$

The strains corresponding to displacements, \mathbf{U}_i , are

$$\boldsymbol{\epsilon}^T = [\epsilon_{xx} \quad \epsilon_{yy} \quad \epsilon_{zz} \quad \gamma_{xy} \quad \gamma_{yz} \quad \gamma_{zx}] \quad (1.3)$$

and the stresses corresponding to $\boldsymbol{\epsilon}$ are .

$$\boldsymbol{\sigma}^T = [\sigma_{xx} \quad \sigma_{yy} \quad \sigma_{zz} \quad \tau_{xy} \quad \tau_{yz} \quad \tau_{zx}] \quad (1.4)$$

To calculate the response of the body, the governing differential equations of equilibrium are established with the help of the principle of virtual work. These equations are subjected to appropriate boundary conditions. According to this principle, the equilibrium of the body requires that for any compatible, small virtual displacements imposed onto the body, the total internal virtual work is equal to the total external virtual work, thus

$$\int_V \bar{\boldsymbol{\epsilon}}^T \boldsymbol{\sigma} dV = \int_V \bar{\mathbf{U}}^T \mathbf{f}^b dV + \int_S \bar{\mathbf{U}}^{sT} \mathbf{f}^s dS + \sum_I \bar{\mathbf{U}}^{iT} \mathbf{F}^i \quad (1.5)$$

where, $\bar{\boldsymbol{\epsilon}}$ is virtual strain vector written as

$$\bar{\boldsymbol{\epsilon}}^T = [\bar{\epsilon}_{xx} \quad \bar{\epsilon}_{yy} \quad \bar{\gamma}_{xy} \quad \bar{\gamma}_{yz} \quad \bar{\gamma}_{zx}] \quad (1.6)$$

$\bar{\mathbf{U}}$ is virtual displacement vector given by

$$\bar{\mathbf{U}}^T = [\bar{u} \quad \bar{v} \quad \bar{w}] \quad (1.7)$$

The superscript s denotes that surface displacements are

considered and the superscript i denotes the displacements at the point where the concentrated forces F^i are applied. The equation (1.5) is an expression of equilibrium containing the compatibility and constitutive requirements in the finite element formulation.

In finite element analysis, the body in Fig. 1.1 is approximated as an assemblage of discrete finite elements with the elements being interconnected at nodal points on the element boundaries. The displacements measured in a local coordinate system x, y, z within each element are assumed to be a function of the displacements of the N finite element nodal points. Therefore, for element m

$$u^{(m)}(x,y,z) = H^{(m)}(x,y,z) U \quad (1.8)$$

where $H^{(m)}$ is the displacement interpolation matrix, the superscript m refers to element m , and U is a vector of the three global displacement components u_i, v_i and w_i at all nodal points. U is a vector of dimension $3N$,

$$\hat{U}^T = [U_1 \ U_2 \ U_3 \ \dots \ U_n] \quad (1.9)$$

where $U_i = \{ u_i \ v_i \ w_i \}$, $i = 1, 2, 3, \dots, n$.

With the assumption on the displacements in (1.8), the corresponding element strains, can be evaluated as

$$E^{(m)}(x,y,z) = B^{(m)}(x,y,z) \hat{U} \quad (1.10)$$

where $B^{(m)}$ is the strain-displacement matrix; the rows of $B^{(m)}$ are obtained by appropriately differentiating and combining rows of the matrix $H^{(m)}$. The stresses in a finite element are related to the element strains and the element initial stresses, and expressed as follows:

$$\sigma^{(m)} = C^{(m)} \epsilon^{(m)} + \sigma^{I(m)} \quad (1.11)$$

where $C^{(m)}$ is the elasticity matrix of element m and $\sigma^{I(m)}$ are the element's initial stresses. The equilibrium equations corresponding to the nodal point displacements of the assemblage of finite elements are rewritten as a sum of integrations over the volume and areas of all finite elements:

$$\begin{aligned} \sum_m \int_{V^{(m)}} \bar{\epsilon}^{(m)T} \sigma^{(m)} dV^{(m)} &= \sum_m \int_{V^{(m)}} \bar{U}^{(m)T} f^{B^{(m)}} dV^{(m)} \\ &+ \sum_m \int_{S^{(m)}} \bar{U}^{S^{(m)T}} f^{S^{(m)}} dS^{(m)} + \sum \bar{U}^{iT} F^i \end{aligned} \quad (1.12)$$

By substituting (1.8) to (1.11) in (1.12),

$$\begin{aligned} &\bar{U}^T \left[\sum_m \int_{V^{(m)}} B^{(m)T} C^{(m)} B^{(m)} dV^{(m)} \right] \hat{U} \\ &= \bar{U}^T \left[\left\{ \sum_m \int_{V^{(m)}} H^{(m)T} f^{B^{(m)}} dV^{(m)} \right\} + \left\{ \sum_m \int_{S^{(m)}} H^{S^{(m)T}} f^{S^{(m)}} dS^{(m)} \right\} \right. \\ &\quad \left. - \left\{ \sum_m \int_{V^{(m)}} B^{(m)T} \sigma^{I(m)} dV^{(m)} \right\} + F \right] \end{aligned} \quad (1.13)$$

The surface displacement interpolation matrices $H^S(m)$ are obtained from the volume displacement interpolation matrices $M^{(m)}$ in (1.8) by substituting the element surface coordinate, and F is a vector of the externally applied forces to the nodes of the element assemblage. The equations for the unknown nodal point displacements are obtained by imposing unit virtual displacements in turn at all displacement components. Thus,

$$\bar{U}^T = \text{identity matrix}$$

Letting $\delta = U$ so,

$$KU = R \quad (1.14)$$

where the load vector, $R = R_B + R_S - R_I + R_C$ (1.15)

The matrix K is the stiffness matrix of the element assemblage,

$$K = \sum_m \int_{V^{(m)}} B^{(m)T} C^{(m)} B^{(m)} dV^{(m)}. \quad (1.16)$$

The body force vector, $R_B = \sum_m \int_{V^{(m)}} F^{(m)T} f^{B^{(m)}} dV^{(m)}$. (1.17)

The surface force vector, $R_S = \sum_m \int_{S^{(m)}} H^{S^{(m)T}} f^{S^{(m)}} dS^{(m)}$ (1.18)

The element initial stresses vector,

$$R_I = \sum_m \int_{V^{(m)}} B^{(m)T} \sigma^{I^{(m)}} dV^{(m)}. \quad (1.19)$$

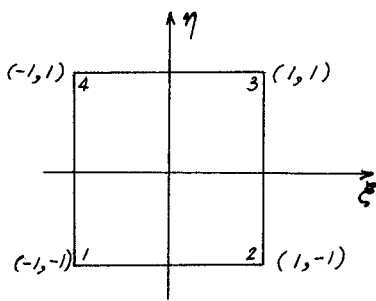
And the concentrated loads, $R_C = F$ (1.29)

Therefore, the formulation of the equilibrium equation in (1.14) above includes the assembly process to obtain the structure matrices from the element matrices. It is usually referred to as the direct stiffness method. The resulting linear simultaneous equations are solved for the unknown nodal variables using the numerical technique. Stresses can be determined by calculating the strains and using Hooke's Laws.

1.2 Derivation of H Matrix for an Isoparametric Element

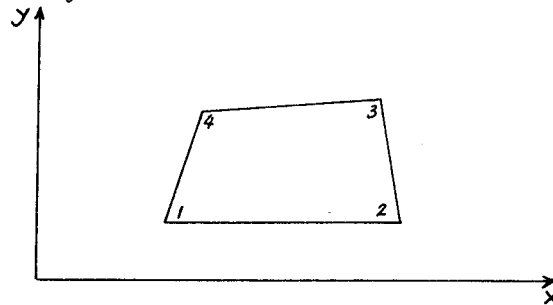
For the isoparametric quadrilateral element, the geometric and the displacement shape functions are defined by the same interpolation formulas. Since the number of nodes is four, a complete polynomial cannot be used (5). The best choice is a bilinear polynomial

$$\{B\} = \{1 \quad \xi \quad \eta \quad \xi\eta\}$$



$$\xi = \{\xi \quad \eta\}$$

Element in Local Coordinate



$$X = \{x \quad y\}$$

Element in Global Coordinate

Note that the displacement field, $u(\xi, \eta) = \{B\}\{a\}$ becomes linear on each side of the element $\xi = \pm 1$ and $\eta = \pm 1$

Since, $\{\xi\}^T = \{-1 \ 1 \ 1 \ -1\}$, and

$\{\eta\} = \{-1 \ -1 \ 1 \ 1\}$, constructed

matrix (Bn) is as follows:

$$(Bn) = \begin{bmatrix} 1 & -1 & -1 & 1 \\ 1 & 1 & -1 & -1 \\ 1 & 1 & 1 & 1 \\ 1 & -1 & 1 & -1 \end{bmatrix}$$

The inverse of (Bn) is found as

$$(Bn)^{-1} = \frac{1}{4}(Bn)^T = \frac{1}{4} \begin{bmatrix} 1 & 1 & 1 & 1 \\ -1 & 1 & 1 & -1 \\ -1 & -1 & 1 & 1 \\ 1 & -1 & 1 & -1 \end{bmatrix}$$

Therefore, the interpolation matrix (H) is given by

$$H = \{B\}\{Bn\}^{-1} = \{H_1 \ H_2 \ H_3 \ H_4\}, \text{ where}$$

$$H_1 = \frac{1}{4}(1-\xi)(1-\eta),$$

$$H_2 = \frac{1}{4}(1+\xi)(1-\eta),$$

$$H_3 = \frac{1}{4}(1+\xi)(1+\eta),$$

$$H_4 = \frac{1}{4}(1-\xi)(1+\eta).$$

Since it is an isoparametric element, the shape function,

H, over the element of reference and the geometrical

transformation functions, $\{\bar{H}\}$, are the same. Hence

$$\{\bar{H}\} = \{H\} \quad \text{which leads to}$$

$$x(\xi, \eta) = \{H_1 \ H_2 \ H_3 \ H_4\} \begin{Bmatrix} x_1 \\ x_2 \\ x_3 \\ x_4 \end{Bmatrix}, \quad \text{and}$$

$$y(\xi, \eta) = \{H_1 \ H_2 \ H_3 \ H_4\} \begin{Bmatrix} y_1 \\ y_2 \\ y_3 \\ y_4 \end{Bmatrix}.$$

CHAPTER 2

THE ANALYSES OF BEAM STRUCTURES

In this chapter, a simple curved beam and two different types of three span continuous beams are analyzed by the MSC/NASTRAN. The simple beam has an I cross section. The first continuous beam has a double-tee cross section, and the other continuous beam is a horizontally curved beam with an I cross section. Various types of finite element modelling techniques are employed to analyze these problems.

2.1 Simple Thin-Walled Curved Beam

This problem is chosen from reference (6) to compare the results obtained from finite element analysis using MSC/NASTRAN for the different boundary conditions of simple supports and fixed supports for a horizontal curved beam with the exact solutions of reference (7). This problem is selected to verify the application of the three-plate beam element concept described in (7). This special modelling technique is used to model the out-of-plane bending of flanges due to non-symmetric loading.

The configuration of the beam is shown in Fig. 2.1. When the appropriate multipoint constraints (MPC) are

specified, the three elements, then, behave as one I-shape. The ends of the web element are located at nodal points i and j , those of the top flange at $i+1$ and $j+1$, and those of the bottom flange at $i+2$ and $j+2$, as shown in Fig. 2.2. All displacements and rotations of the flange mesh points, except the rotation about the Z-axis, are equated to those of the web. The resulting three-plate beam element has eight degrees-of-freedom: three displacements and three rotations of the entire section and two flange-warping rotations. For symmetrical sections, the warping rotation of the bottom flange is opposite to that of the top flange. The degrees-of-freedom are then reduced to seven. The boundary conditions specified for pinned supports are $w(0) = w(L_c) = \phi(0) = \phi(L_c) = 0$; and for those of the fixed support are $w(0) = w(L_c) = \phi(0) = \phi(L_c) = w'(0) = w'(L_c) = 0$, where w is the displacement in Z direction, ϕ is the warping rotation, w' is the first derivative of w , which physically means the rotation about Z axis, and L_c is the length of the beam along the curve. Each plate is divided into 4 straight beam elements. The beam then has 15 nodes and 12 elements.

The Solutions and Results of the Simple Thin-Walled Curved Beam

The results are shown in Table 2.1. The finite element analysis results from (6) and MSC/NASTRAN are compared to those from the exact solution (7). It can be seen that the results for pinned supports from MSC/NASTRAN are much closer to the exact solutions than those from (6). The same beam is then used as a fixed supported beam with the loading being the same. The results given by the fixed support conditions are poor compared to those of the pinned support conditions.

2.2 The Continuous Double-Tee Beam

The double-tee beams are widely used structural forms in civil engineering. It is highly functional, as it not only meets structural requirements, but also provides a flat useful surface. In this case, the symmetrical and unsymmetrical uniformly distributed loads are applied on the middle span. Fig. 2.3 shows the geometry of the beam and the loading conditions. The beam is fabricated from steel which has the modulus of elasticity, E , 30.0 KN/mm^2 and the Poisson's ratio, ν , 0.3 . The specified boundary conditions for supports A, B, C, and D are: $u = w = \phi = 0$ and $v(0) = \phi''(0) = 0$. The u , v , and w are the translations in x , v , and z direction respectively, ϕ is the torsional rotation, and ϕ'' is the second

derivative of ϕ . The value of ϕ'' equals to zero physically means that the cross section can warp freely. The MSC/NASTRAN program does not provide the capability to specify ϕ'' as a degree of freedom.

Four finite element models consisting of beam element, rectangular plate element, solid brick element, and three-plate beam element using MPC, shown in the Fig. 2.4, are constructed.

2.2.1 Beam Element Model

The continuous beam is constructed from 60 200-mm beam elements. Since the beam element is the straight element which, herein, passes through the neutral axis of the beam, the unsymmetrical uniformly distributed load has to be applied in the form of a symmetrical uniformly distributed force and a uniformly distributed torque which have the magnitudes of 1200 KN/mm and 7.2×10^5 KN-mm/mm respectively. The boundary conditions of the beam are shown in Table 2.2.

2.2.2 Rectangular Plate Element Model

The assembly of three rectangular plates is constructed composed of two vertical plates and a horizontal plate, as shown in Fig. 2.4(b). Each plate is divided into 200 x 600 - mm rectangular plate elements. Since

Kirchhoff's hypothesis is applied for flat plate and shell element formulation in the MSC/NASTRAN finite element analysis program, the rotational degree of freedom about the normal to the plane is omitted, leaving five degree-of-freedom at a node (8). There are 427 nodes and 360 elements in the finite element model. The boundary conditions of the beam are shown in Table 2.2.

2.2.3 Solid Brick Element Model

This type of element contains only **translational** degrees-of-freedom. It is a modified isoparametric element which uses selective integration points for different components of strain. There are three different schemes of integration points available, whose selection depends on the number of edge grid points which have been deleted (9). Here a 2x2x2 integration scheme is used. The material coordinate system used corresponds to the element coordinate system. In this case the beam is composed of 560 small brick elements with 8 nodes per element, as shown in Fig. 2.4(d). The boundary conditions of the beam are shown in Table 2.2.

2.2.4 Three-Plate Beam Element Model

The webs and flange are considered as three separate elements. The ends of the two web elements are located

at node points $i+1$ and $j+1$ and at $\bar{i}+1$ and $\bar{j}+1$; those of the flange are at i and j and at \bar{i} and \bar{j} respectively, as shown in Fig. 2.5. The offsets of the flange are placed at the appropriate locations relative to the web. By specifying appropriate multipoint constraints, all displacements and rotations of the flange mesh points, except the rotation about the Z axis, are equated to those of the web so that the three elements behave as one double-tee shape. The resulting three-plate element has seven degrees-of-freedom: three displacements and two rotations of the entire section, one rotation for web, and one rotation for flange. The boundary conditions are shown in Table 2.2.

The Solutions and Results of the Continuous Double-Tee Beam

Two loading cases are considered. The results at the sections located at 3000 mm, 6000 mm, and 9000 mm from the left end are compiled for comparison purposes. The displacements and flexural stresses at 300 mm above the bottom and at the top fiber of the cross section (point E, F, and G in Fig. 2.3(b)) are calculated and shown in Tables 2.3 and 2.4. For the symmetrical loadings, most of the models give good results, except in a few cases. The beam element gives very good results for both the

stresses and the displacements. Comparing the results for stresses and displacements from the beam element to those obtained from the simple beam theory (10), it was found that the difference was only -0.74% and 6.2% respectively. For this beam, the cross section is relatively large; however, the beam elements are considered as joined at their center lines so that the actual clear span distance and thus flexibility of the member is reduced and should be taken into account (8).

The rectangular plate element does not yield accurate results for the stresses in upper fibers. However, the accurate stress results in the webs are obtained. The solid brick element usually is more flexible than any other type of elements, i.e. it gives larger displacements and smaller stresses. Good stress results are obtained from the three-plate beam element; however, it gives very poor results for displacement.

For the case of unsymmetrical loading, the effects of warping cannot be included for the beam element and the three-plate beam element, as shown in Table 2.4. Even though the webs of the three-plate element are offset, the actual condition of loading cannot be used, i.e. instead of applying unsymmetrical uniformly distributed

force, the uniformly distributed force and torque are applied on the flange. Comparing the exact solution (10), which is the simple beam theory, the rectangular plate element and the solid brick element do not give good results for both displacements and stresses.

For the exact solution (10), given in Table 2.3 and 2.4, the simple beam theory is used. The simple beam theory is also used to compute the flexural stresses for the beam element as in the following example. For the continuous double-tee beam which is subjected to symmetrical load, at point G for the first support, the bending moment obtained from the finite element using the beam element is $M = 2.70 \times 10 \text{ KN-mm}$.

The flexural stress at point G, $\sigma = Mc/I$, where

σ = flexural stress,

M = bending moment,

$c = 126.2 \text{ mm}$ = distance from neutral axis to the point G, and $I = 5.4054 \times 10^4 \text{ mm}^4$ = the moment of inertia along neutral axis. Therefore,

$$\sigma = 2.70 \times 10 \times 126.2 / 5.4054 \times 10$$

$$\sigma = 63.04 \text{ KN/mm}^2.$$

It should be noted here that for the plate element and

the solid element, the conditions of the supports are different, as shown in Table 2.2, so the different stresses are obtained at the intermediate supports (1/4 length and 3/4 length in Table 2.3 and 2.4).

2.3 The Horizontal Curved Beam

The use of curved girders in highway bridges located on horizontally curved alignments has increased progressively due to the modern emphasis on aesthetic considerations as well as simplicity of arrangement, details, and construction. The curved girders of a horizontally curved bridge are primary members that determine its load carrying capacity and, therefore, need careful consideration. In this case, a W33x118 beam is used and a uniformly distributed force of magnitude of 1.25 kips/ft is applied over **the** entire span of the beam. For the continuous horizontal curved beam, four finite element models are presented. The results from the analyses are compared to those from the V-load method (11). The geometry and the properties of the cross section are shown in Fig. 2.6. The boundary conditions of all cases are shown in Table 2.5.

2.3.1 Rectangular - Coordinate Beam Element Model

The straight beam elements are used with the nodal

points in rectangular coordinates and each beam element has the length of one foot. To define the boundary conditions for the supports, since the alignments of the supports B, C, and D in Fig. 2.7 are located radially, the three new coordinate systems are established so that the local Y-coordinates of the supports B, C, and D are the tangents of the curve of the beam. Then the restraints can be specified according to the new coordinate system.

2.3.2 Cylindrical - Coordinate Beam Element Model

The one-foot beam elements are also used in this case, but all nodal points are specified in cylindrical coordinates. By using these coordinates, the boundary conditions of each support can be specified in r , θ , and Z directions, so new local coordinate systems are not necessary to be established. The alignment of the beam using cylindrical coordinates, including the significant angles, is shown in Fig. 2.8.

2.3.3 Continuous Straight Beam Model

A straight continuous beam is created in such a manner that the length of each straight girder segment is set equal to the respective curved-girder arc length. This model is set up to compare its results to those of the curved beams.

2.3.4 Three-Plate Beam Element Model

The same concepts applied to the simple thin-walled curved beam have been used. The same arrangement of the three parts of the beam used is also shown in Fig. 2.2. The resulting three-plate element has eight degrees-of-freedom: three displacements and three rotations of the entire section, and two flange-warping rotations.

The Solutions and Results of the Continuous Horizontal Curved Beam

For the continuous horizontal curved beam, the displacements and the bending moments are obtained from the MSC/NASTRAN finite element analysis and the Y-load analysis (9), as shown in Table 2.6. The bending moments obtained from every solution are also plotted, as shown in Fig. 2.9. The results from the Y-load method are very good compared to those from the MSC/NASTRAN finite element analysis. The bending moment at the middle of the second span, given by the Y-load analysis, is more conservative than that from the MSC/NASTRAN finite element analysis. In this case, the three-plate beam element does not give good results for the displacements; however, the results for the bending moments are good. In addition, it should be noted that the curvature of this

beam is considerably **small**, so that the results obtained from the straight beam and from the curved beam are not much different.

CHAPTER 3

THE RIVETED CONNECTIONS

The riveted connections have been popularly used as the components of multistory building frames. Many full-scale tests were conducted to observe the behavior of these type of connections (12, 13, 14). In this chapter the MSC/NASTRAN finite element analysis program is used to analyze two types of connections, a butt joint and a beam-to-column connection. The results from the finite element analyses are compared with the experimental results of references (12) and (13).

3.1 The Butt Joint

The butt connection selected for this study is one of the eight full sized bolted butt joints used in static tension tests, conducted at Lehigh University in 1965 (13). The butt joint is fabricated from 1-inch plies of A 440 steel plates and connected by 7/8-inch ASTM A 490 high-strength bolts. The detail of the butt joint and the properties of the plates are illustrated in Fig. 3.1. The stress - strain relationships used to determine the idealized nonlinear elastic material behavior of the A490 bolt are shown in Fig. 3.2 (16). Due to symmetry,

only half of the structure is analyzed.

3.1.1 The Rectangular Plate Element Model

The finite element modeling of the rectangular plate element is shown in Fig. 3.3(a). For the full-sized test, when installing a high strength bolt to the structure, it is torqued to a high tension. This produces a high clamping force and consequently a frictional force develops between the flaying surfaces. In bearing-type connections, it is assumed that the loads to be transferred are larger than the friction caused by tightening the bolts with the result that the members slip a little on each other, putting the bolt in shear. To utilize this behavior in the finite element model, rod elements are used. One rod element is discretized to carry the pretension load of the bolt and the other rod to resist the shear load. The rod elements replacing these two bolts are shown in Fig. 3.4(15). Two rod elements, numbered 1 and 2, carry the pretension of the two bolts, and one rod element, numbered 3, carries the shear load to be resisted by the same two bolts. Hence, in each shaded area, there are three rod elements simulating the behavior of two bolts. The finite element model in Fig. 3.3 then has 52 nodes, 24 plate elements, 8 rod

elements carrying tension force, and 4 rod elements carrying shear force. For the boundary condition of this model, as it is assumed to be the plane stress analysis, the degrees of freedom of the translation in the direction normal to the plate, which is Z direction in Fig. 3.3(a), are fixed, as are all the translations of the nodes at the left end and the bottom of the bottom plate.

3.1.2 The Solid Brick Element Model

The same connection is also analyzed using solid brick elements. The modelling of the three-dimensional butt joint using the **eight node solid brick** element is shown in Fig. 3(b). The tension property of the bolts as used for the bolts in the rectangular plate element case is used again. However, in this case one bar element is used to represent one bolt, and each bar element carries both tension and shear forces. The finite element model of the butt joint then has 112 nodes, 36 solid brick elements, and 8 bar elements.

The Results of the Butt Joint

The translations in x-direction at the right end of the structure, node 51 for the rectangular plate element case and node 64 for the solid element case, are plotted

in Fig. 3.5 to compare with the experimental results (16). Since this is an elastic analysis, the relation of load and deformation is a straight line. The shear forces in rod elements are also shown in Table 3.1. It can be seen that the outer rivets carry more load than the inner rivets. Similar behavior is also observed in the experiment (16).

3.2 The Beam-to-Column Moment Connection

This type of connection is widely used as components of a typical multistory steel building frame. In recent years, the use of ASTM A325 and A490 high strength bolts have become popular for field erection. Full-scale tests of the beam-to-column connections were conducted at Lehigh University (12). Even though the full-scale tests give realistic results, it is not feasible to carry out an extensive testing program for each type of combination of these connections in order to assess accurately their response because of cost and time involved. In addition, for the beam-to-column moment connections, the *geometry* is too complicated to obtain a closed form solution.

In this section, the beam-to-column connection shown in Fig. 3.6 is analyzed by using the MSC/NASTRAN

finite element program. Two types of finite element models are constructed using the plate element and the solid elements. Also in this case, due to symmetry, only half of the structure is analyzed.

3.2.1 The Plate Element Model

The finite element modeling of the plate element is shown in Fig. 3.7(a). Two shapes of the plate elements are used, the rectangular and the triangular plates. To represent the behavior of the pretensioned bolts in the finite element model, the rod elements are used again, as shown in Fig. 3.4. The finite element model then has 172 rectangular plate elements, 2 triangular plate elements, 16 rod elements carrying tension forces, and 8 rod elements carrying shear forces. Since, in this case, the structure is analyzed as a plane stress problem, all the translations normal to the plane of the plate element, which is the translation in Z-direction as shown in Fig. 3.7(a), are fixed. The boundary conditions specified for the structure are: for all the nodes on the plane of symmetry, the translations normal to the plane of symmetry, which is x-direction as shown in Fig. 3.7(a), are fixed. The concentrated forces of the total magnitude of $P/2 = 100$ Kips are applied to the

nodes on the top of the column in the downward direction (negative y-direction in Fig. 3.7(a)).

3.2.2 Solid Element Model

Two types of solid elements are used, the brick (HEXAhedral) and the wedge (PENTAhedral) shapes, which are represented by CHEXA and CPENTA elements in the MSC/NASTRAN respectively. The three-dimensional finite element model is shown in Fig. 3.7(b). The finite element model, consisting of 1088 nodes, has 466 HEXA elements, 2 PENTA elements, 16 bar elements connecting the moment plate and the beam, and 3 bar elements connecting the shear plate and the beam. For this type of element, only translational degrees of freedom are retained at each node. Since the plate element case is a plane stress analysis, the z-translation at every node of the structure is fixed, leaving only 2 degrees of freedom per node for the whole structure. The boundary conditions specified are: the translations of the nodes on the plane of symmetry in x-direction (horizontal) and the translations of the nodes at the supports on the right end of the beam in y-direction (vertical) are fixed. The concentrated forces of the total magnitude of 100 kips are applied on the top of the column in the downward

(negative v -) direction.

The Results of the Beam-to-Column Connections

The translation at the bottom of the column, node 1 in the plate element case and nodes 7 and 11 in the solid element case, in vertical (y -) direction with the load, obtained from the MSC/NASTRAN is plotted in Fig. 3.8 , along with the test results and the predicted results by the elastic plastic analysis performed in reference (12). The plot shows that the results from solid element are closer to the test results than those from plate element. The stress distributions in beam and column components are plotted and compared with the test results. Fig. 3.9 to Fig. 3.11 show the variation of the horizontal stresses at the end of the moment plate, the variation of horizontal stresses at the column innerface, and the variation of the vertical stresses along the column innerface. The test results (14) and finite element results show fairly good agreement for all these three cases.

CHAPTER 4

CONCLUDING REMARKS AND RECOMMENDATIONS

The finite element analysis is a powerful tool for solving engineering analysis problems. MSC/NASTRAN is one of the finite element computer programs which provides several options of finite element representations for the same problems. A number of civil engineering structures are analyzed by using the MSC/NASTRAN program.

For the simple thin-walled curved beam using MPC modelling technique, the good results are obtained only for the case of pinned-end. It can be seen that the beam element model gives very good results for the continuous double-tee beam subjected to symmetrical uniformly distributed load, however, it is not able to show the torsional effect, when subjected to unsymmetrical uniformly distributed load. The plate element model and the solid element model do not give the good results for the continuous double-tee beam both in case of symmetrical loading and unsymmetrical loading. For the horizontal curved beam, all the finite element models give very good results except the MPC model, which gives inaccurate results for the displacements. In general, the MPC model gives good results for stresses in both types of beams.

For the butt joint analysis, both plate and solid element models give very good results when compared to the

experimental results (14). For the ~~beam-to-column~~ connection, accurate results are obtained for both the stresses and displacement. It can be seen that the more accurate results are obtained when the three-dimensional solid elements are used to model the **connections**. However, one should be aware that it is time consuming to set up the model and the computer time will be much more in the case of the solid elements than in the case of the plate elements. As it can be **seen, in** the case of the beam-to-column connection, the number of nodes of the solid element model is more than four times that of the plate element model. For the general beam structures without torsional effect, the beam element is the most suitable to use.

Although the MSC/NASTRAN is a powerful finite element analysis program and provides many types of elements, the user must have sufficient understanding of the problems and the finite element theory to choose suitable elements to make a finite element model.

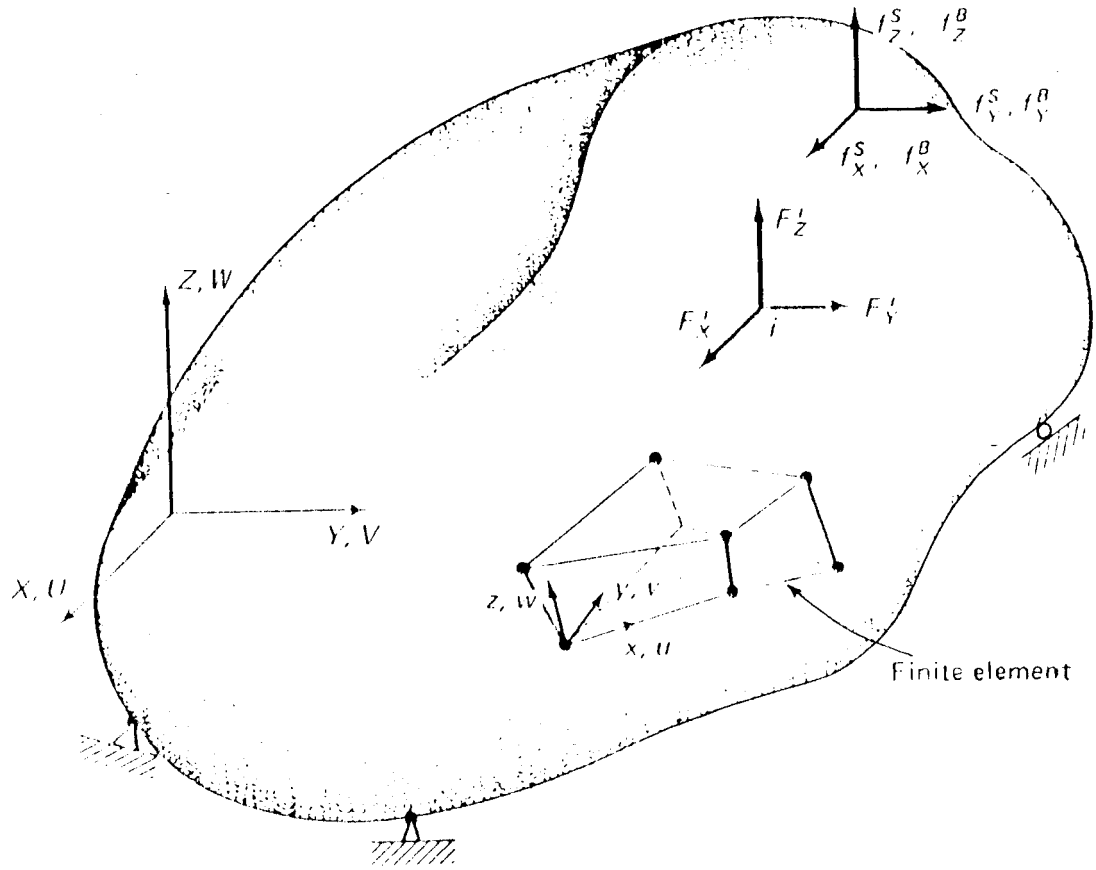
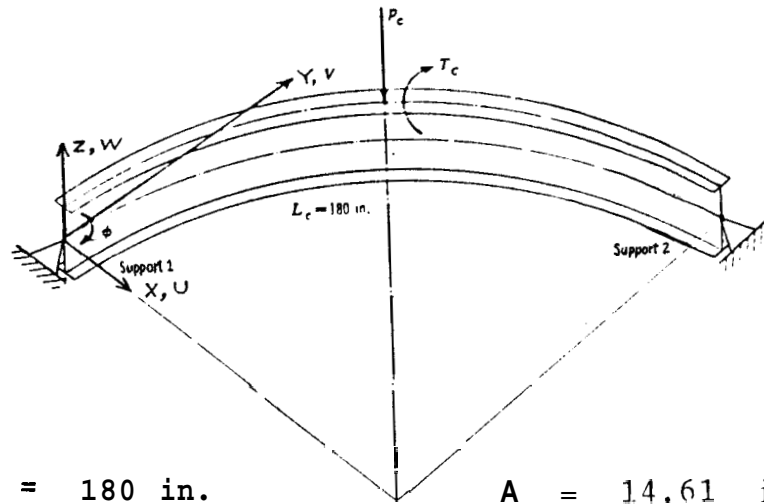


Fig. 1.1 General Three Dimensional Body



$L_C = 180 \text{ in.}$	$A = 14.61 \text{ in}^2$
$E = 29.0 \times 10^3 \text{ ksi}$	$I_X = 273.2 \text{ in}^4$
$\nu = 0.3$	$I_Z = 93.0 \text{ in}^6$
$K_T = 1.39 \text{ in}^4$	

Concentrated Load and Torque at Midspan,

$P_C = 2.0 \text{ kips} , T_C = -20.0 \text{ kips} \cdot \text{in}$

Fig. 2.1 Single Span Horizontal Curved Beam

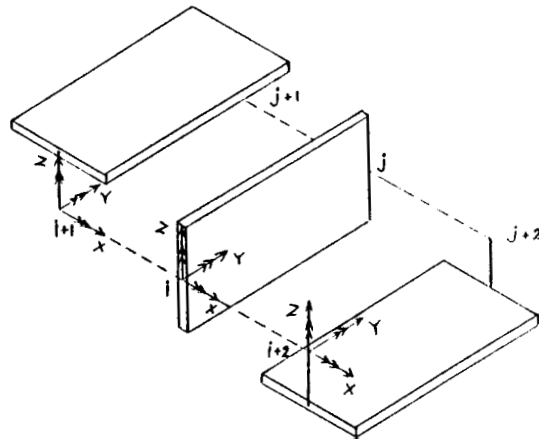
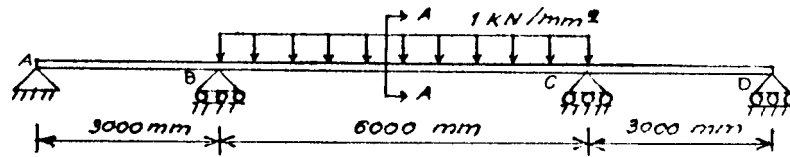
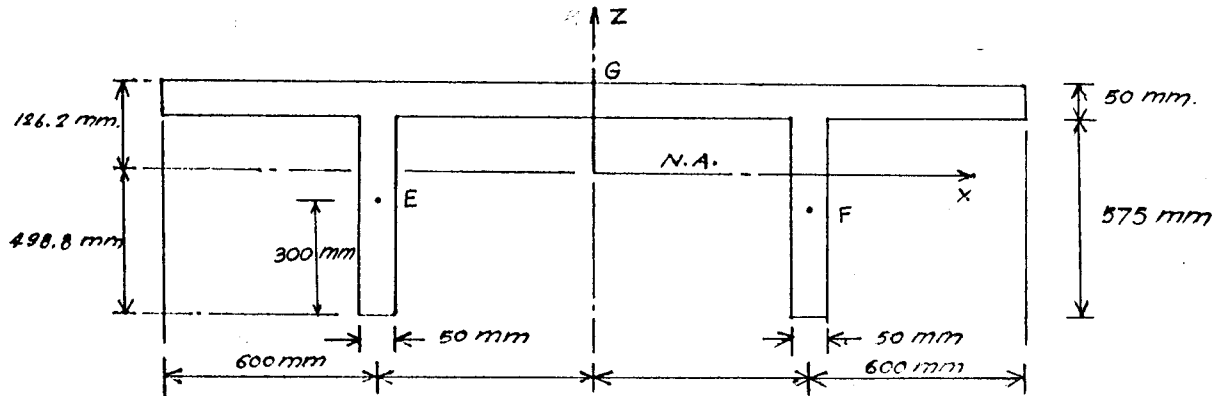


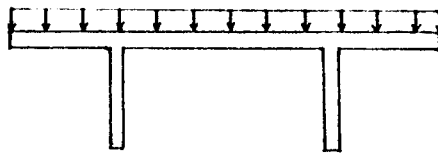
Fig. 2.2 Three-Plate Beam Element of Horizontal Curve Beam



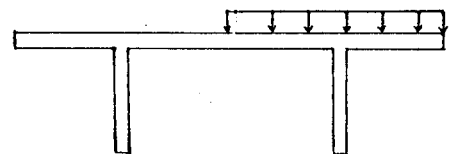
(a) Side-View



(b) Cross-Section



(c)

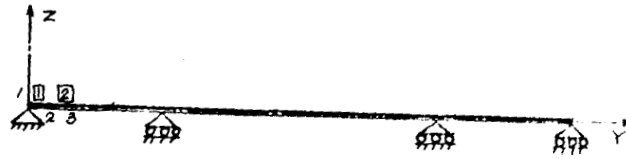


(d)

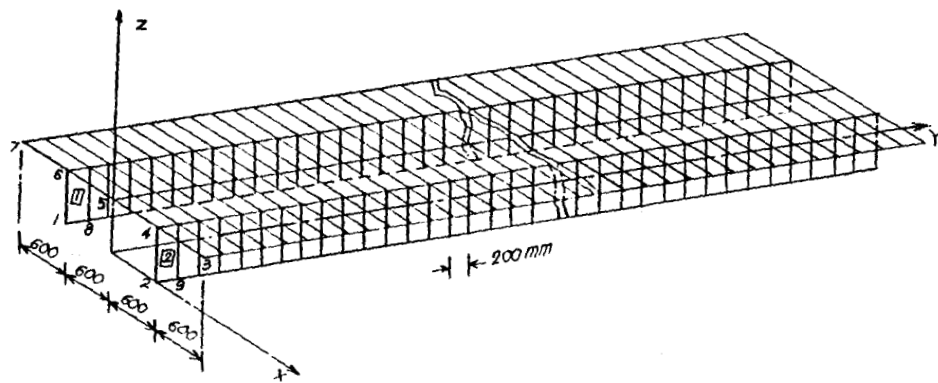
(c) Cross-Section at A-A of Loading Case 1

(d) Cross-Section at A-A of Loading Case 2

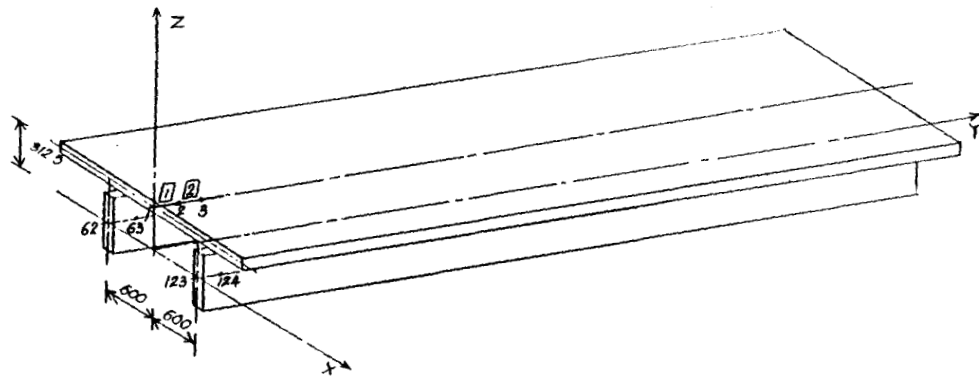
Fig. 2.3 The Continuous Double-Tee Beam



(a) Beam Element (61 nodes, 60 elements)

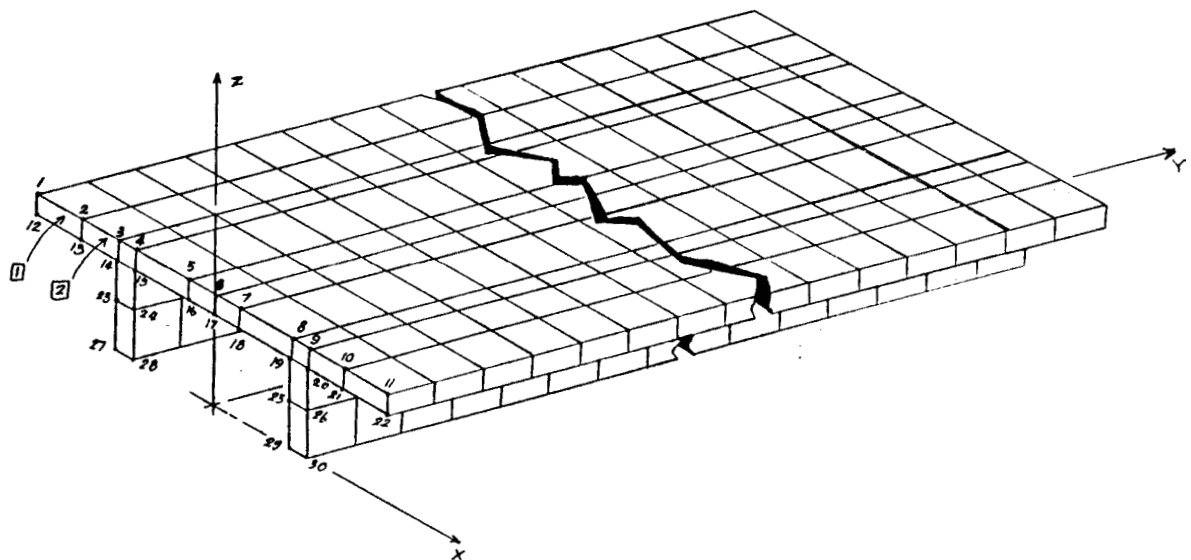


(b) Rectangular Plate Element (427 nodes, 360 elements)



(c) Three-Plate Beam Element (183 nodes, 180 elements)

(Continued)



(d) Solid Brick Element (1230 nodes, 560 elements)

Fig. 2.4 The Finite Element Models of the Continuous Double-Tee Beam

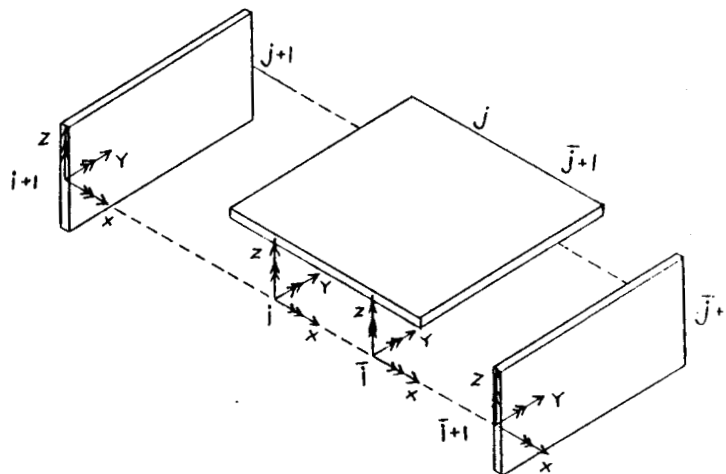
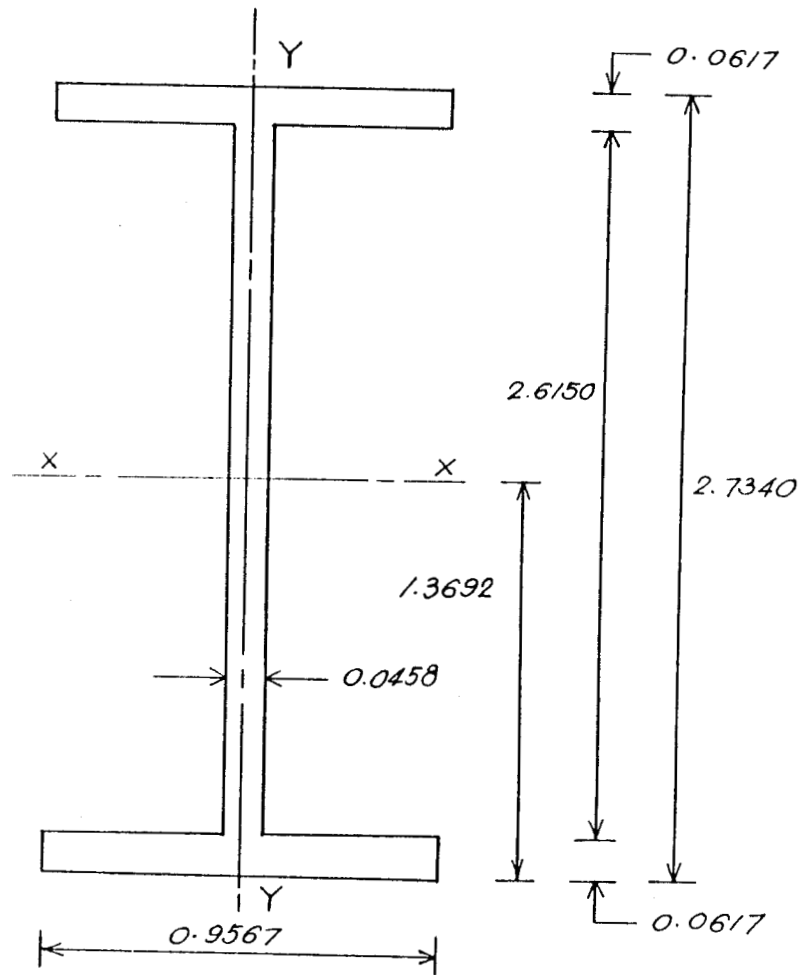


Fig. 2.5 Three-Plate Beam Element of Double-Tee Seam



$$A = 0.241 \text{ ft}^2, \quad I_{xx} = 0.2845 \text{ ft}^4, \quad I_{yy} = 9.018 \times 10^{-3} \text{ ft}^4$$

$$\nu = 0.3, \quad E = 4.32 \times 10^6 \text{ kips/ft}^2$$

Note: All dimensions are in feet.

Fig. 2.6 Geometry of the Cross Section and Properties of W33x118 Beam Used for Horizontal Curved Beam

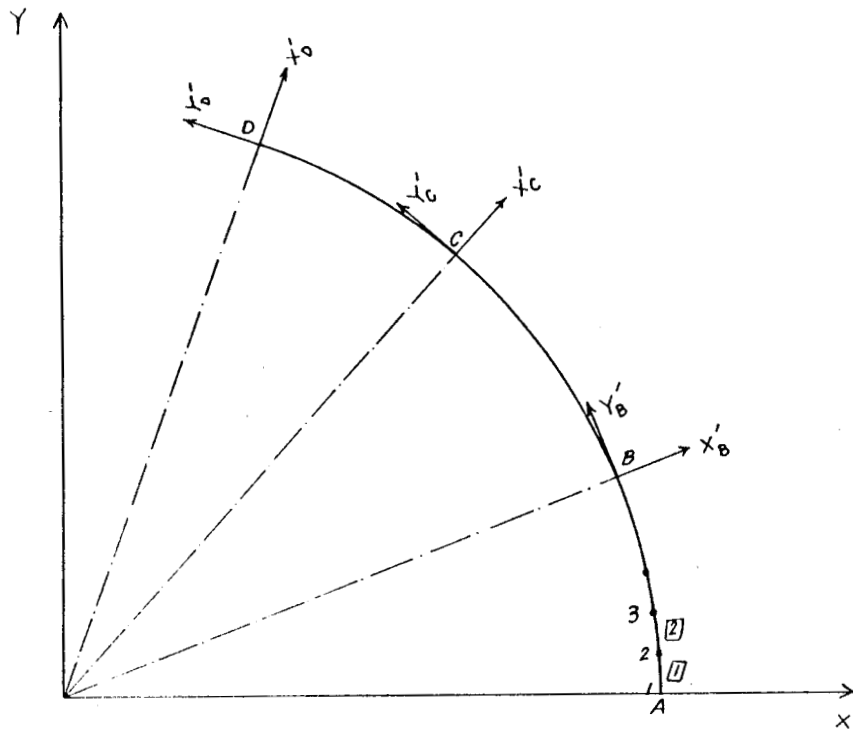


Fig. 2.7 The Alignment of the Continuous Horizontal Curved Beam Using Rectangular Coordinates

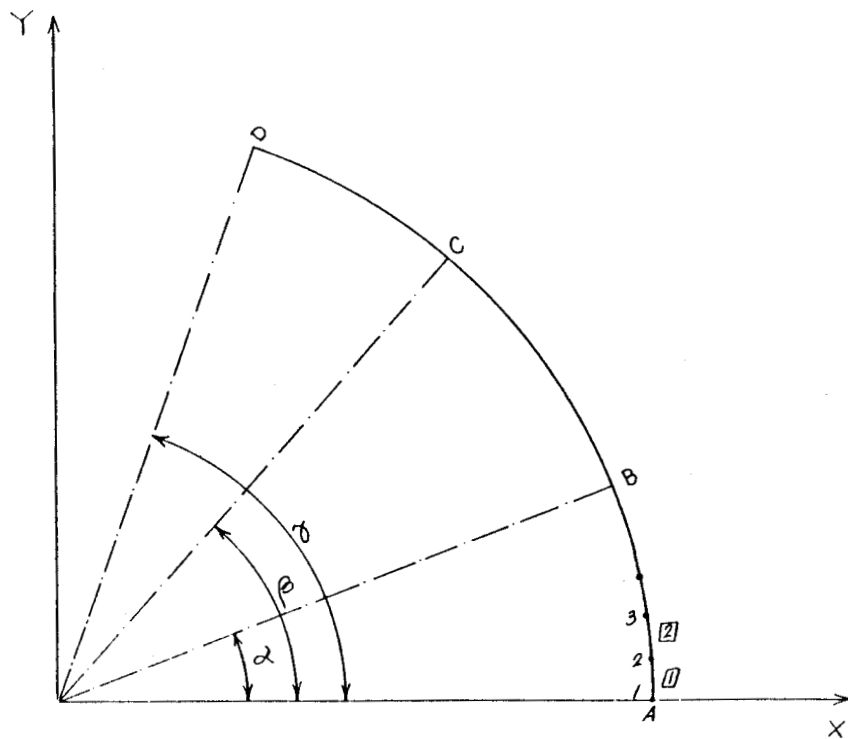


Fig. 2.8 The Alignment of the Continuous Horizontal Curved Beam Using Cylindrical Coordinates

$$(\alpha = 0.08783, \beta = 0.1975, \delta = 0.2852)$$

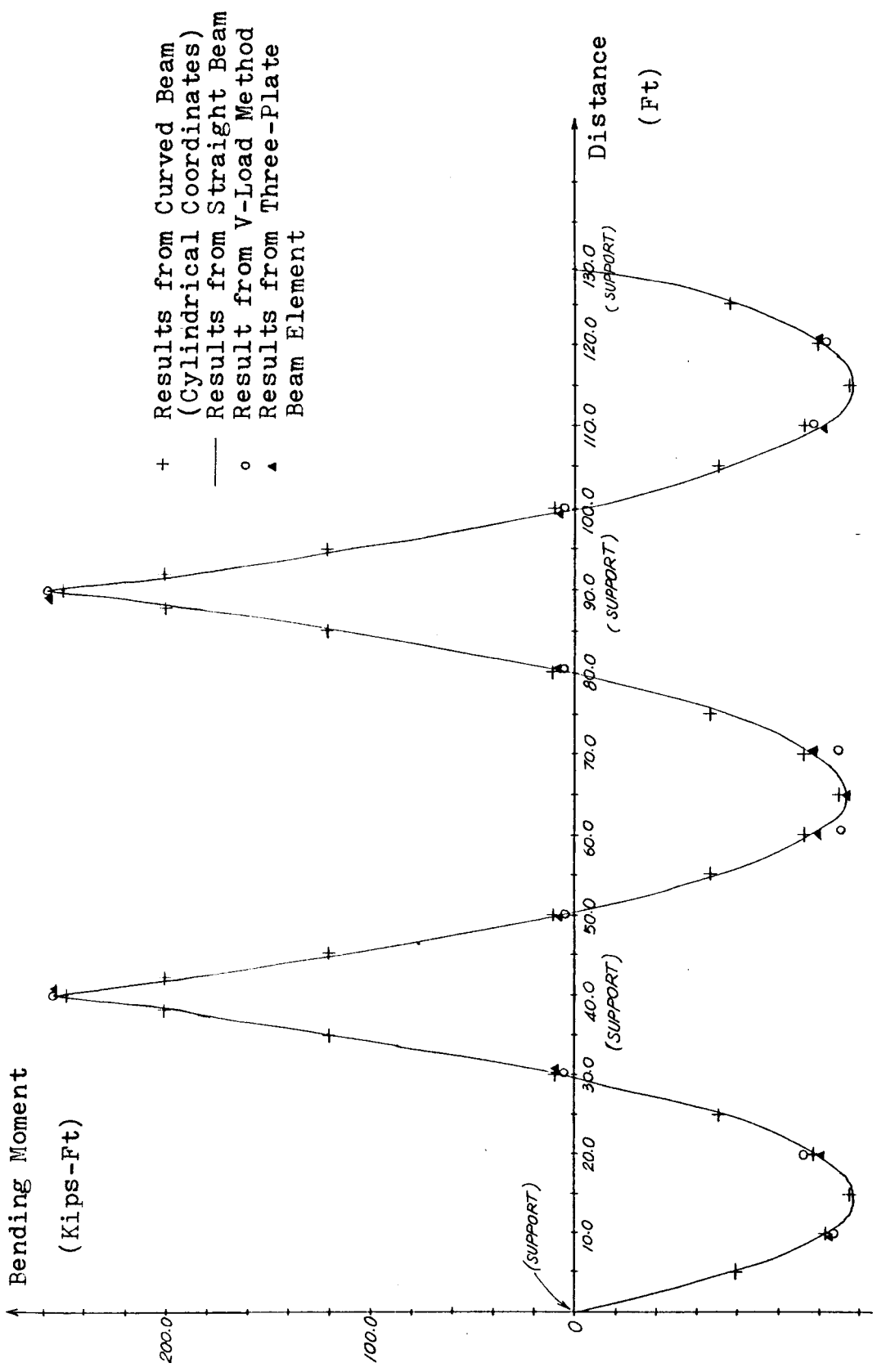
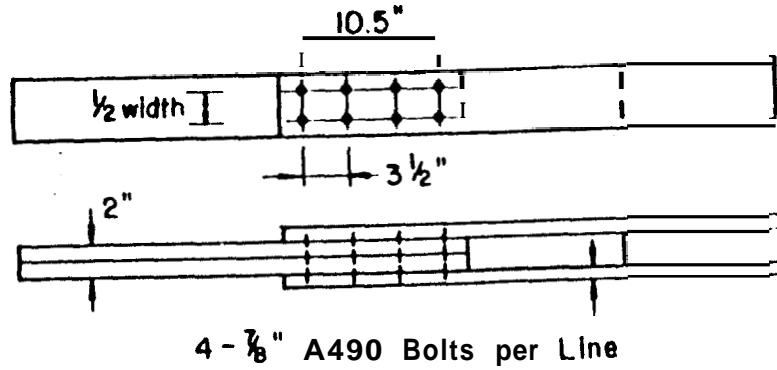
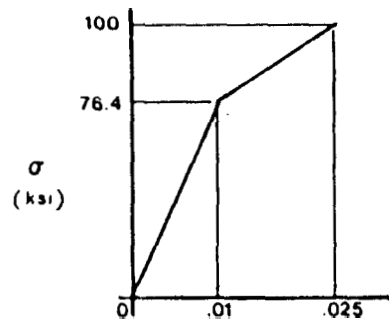


Fig. 2.9 The Bending Moment Diagram of Horizontal Curved Beam

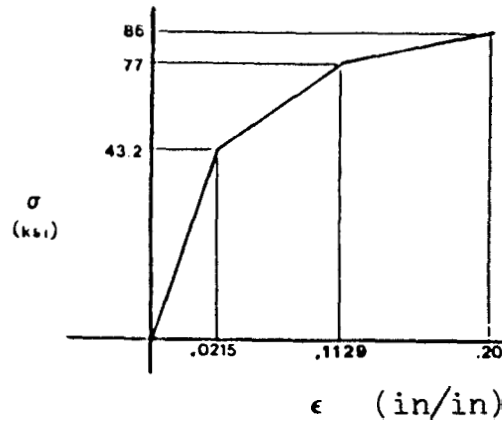


Properties of Plate: $E = 2.957 \times 10^4 \text{ ksi}$, $\nu = 0.3$

Fig. 3.1 Geometry and Properties of Butt Joint

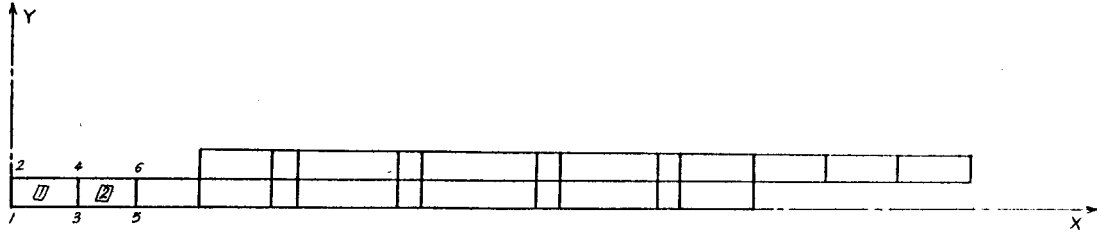


(a) The Bar Element Assumed to Carry Pretension of the bolt



(b) The Bar Element Assumed to Carry Shear Load

Fig. 3.2 Idealized Nonlinear Stress-Strain behavior for the Bar Element used as A499 Bolt

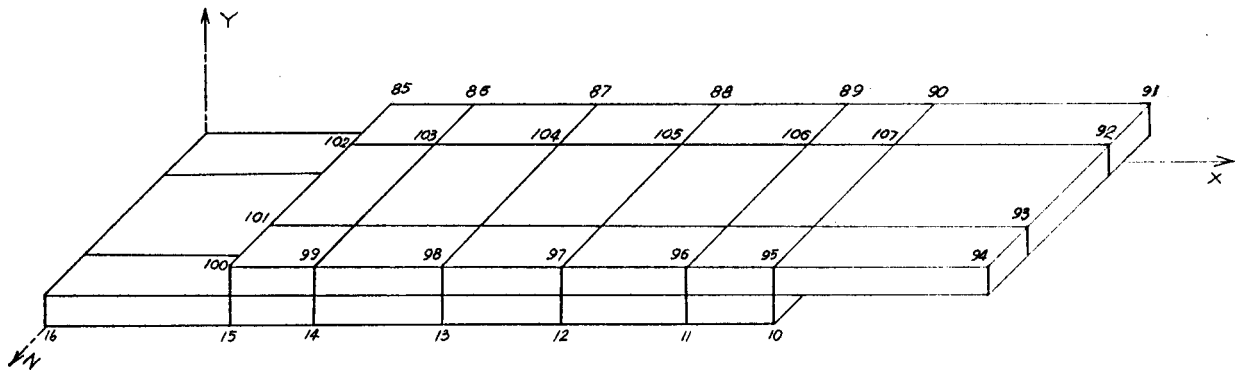


52 Nodes , 24 Plate Elements

8 Bar Elements (tension)

4 Bar Elements (shear)

(a) Rectangular Plate Element



243 Nodes 174 Plate Elements

16 Bar Elements (tension)

8 Bar Elements (shear)

(b) Solid Brick Element

Fig. 3.3 The Finite Element Models of Butt Joint

Bolt Location

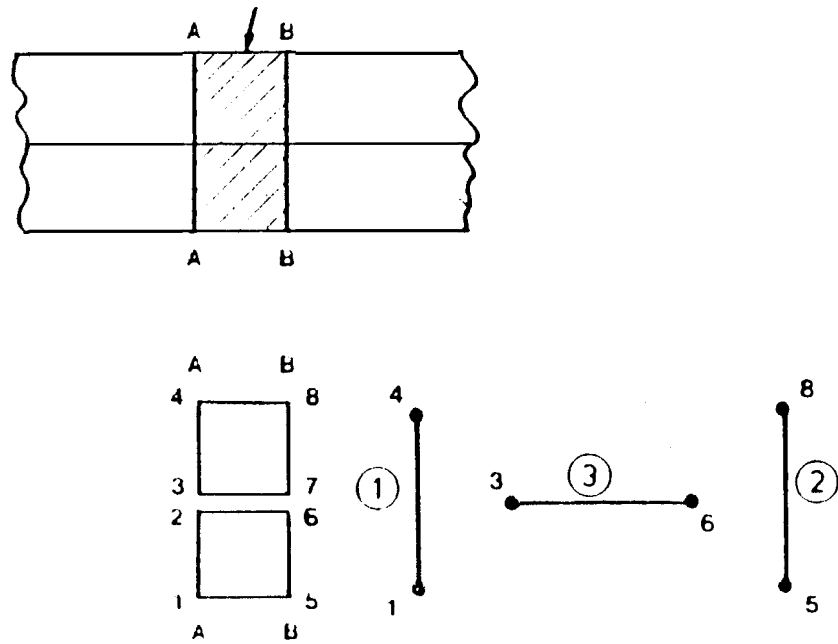


Fig. 3.4 Modelling of Bolts With Bar Elements

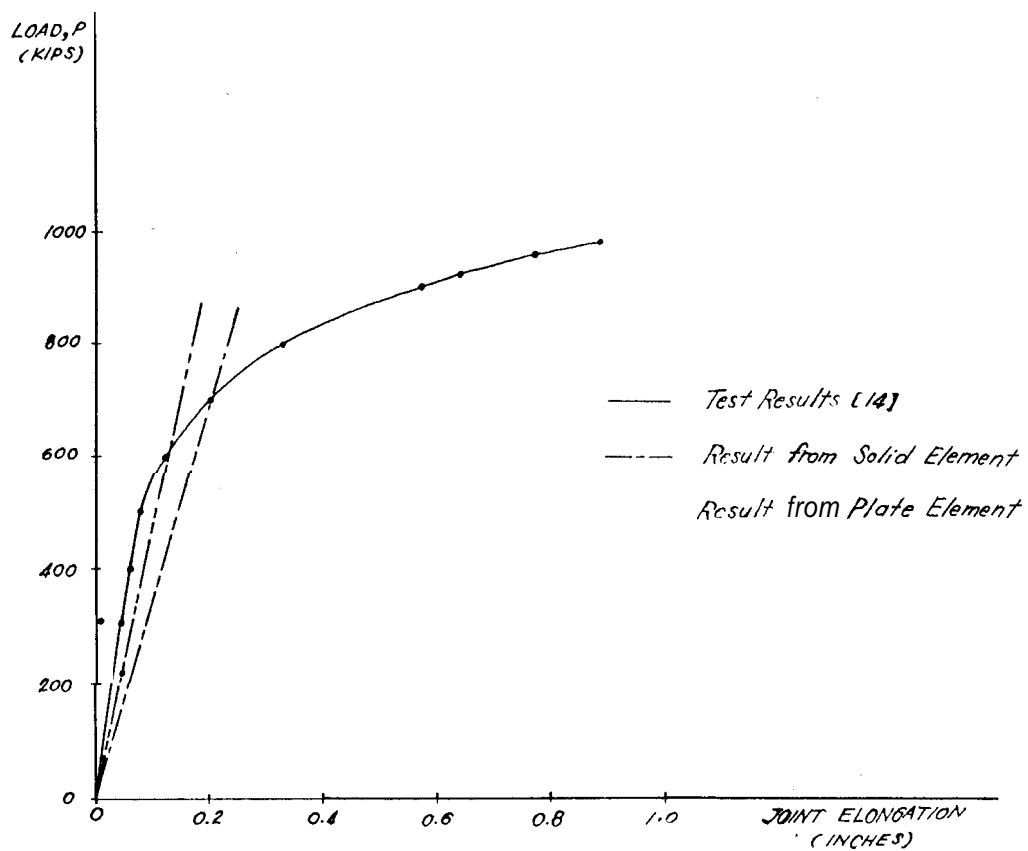
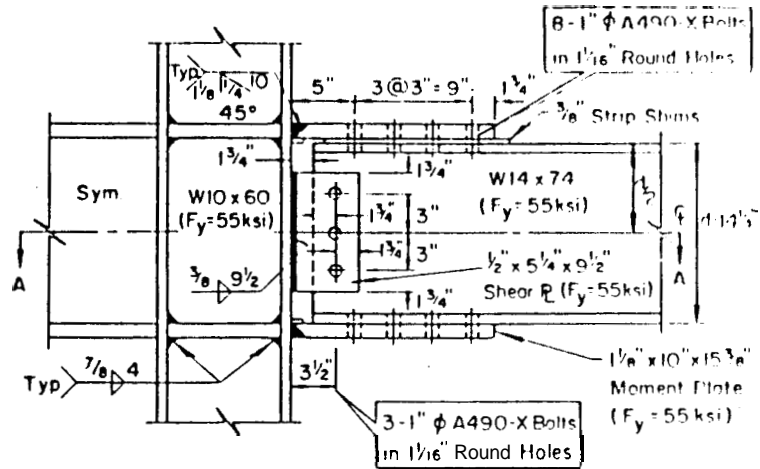
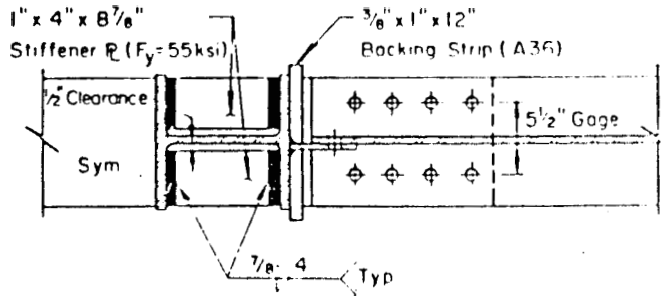


Fig. 3.5 Load-Deformation Characteristic of Butt Joint



Elevation



Section A-A

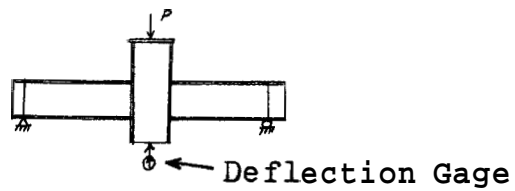
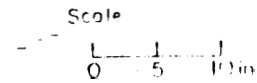
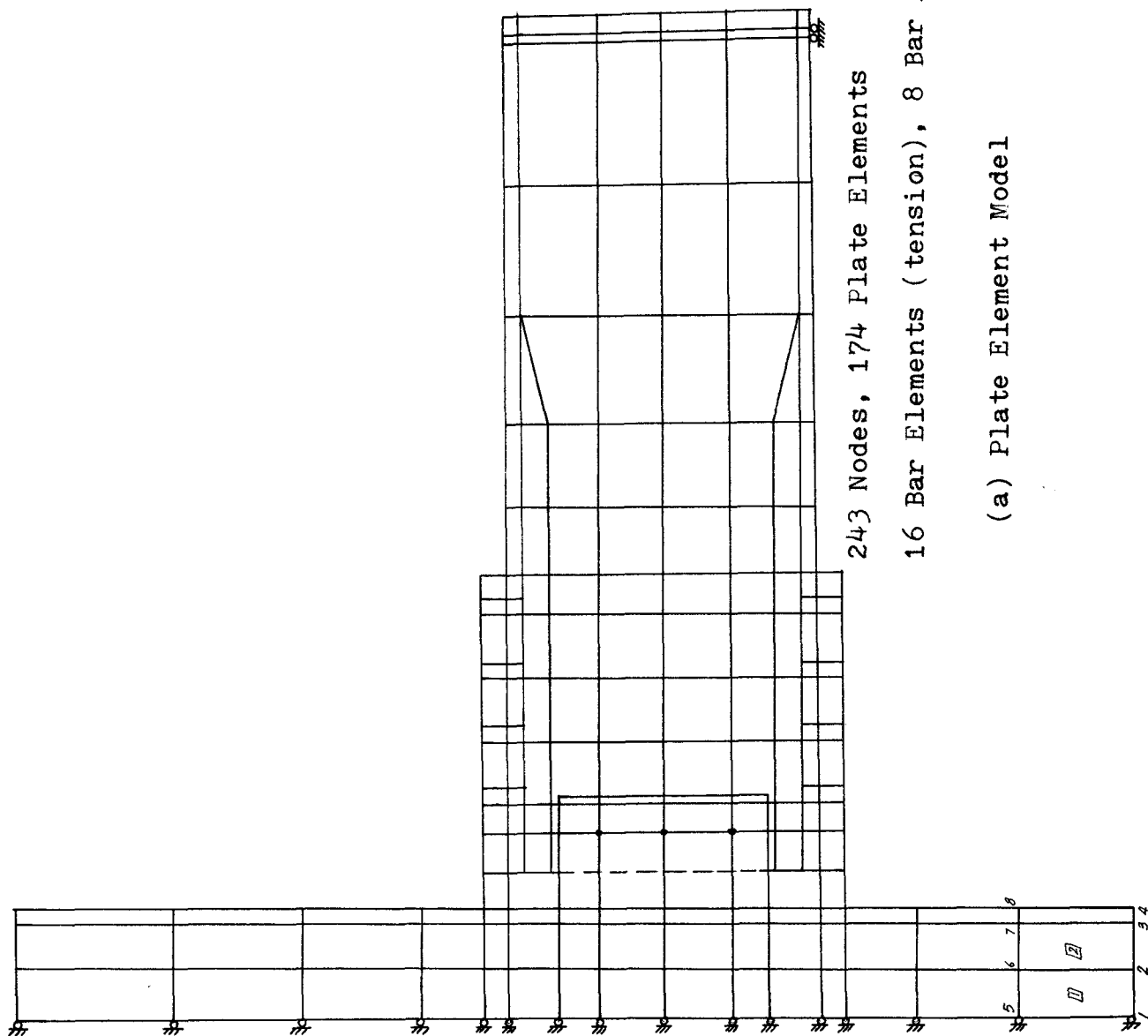
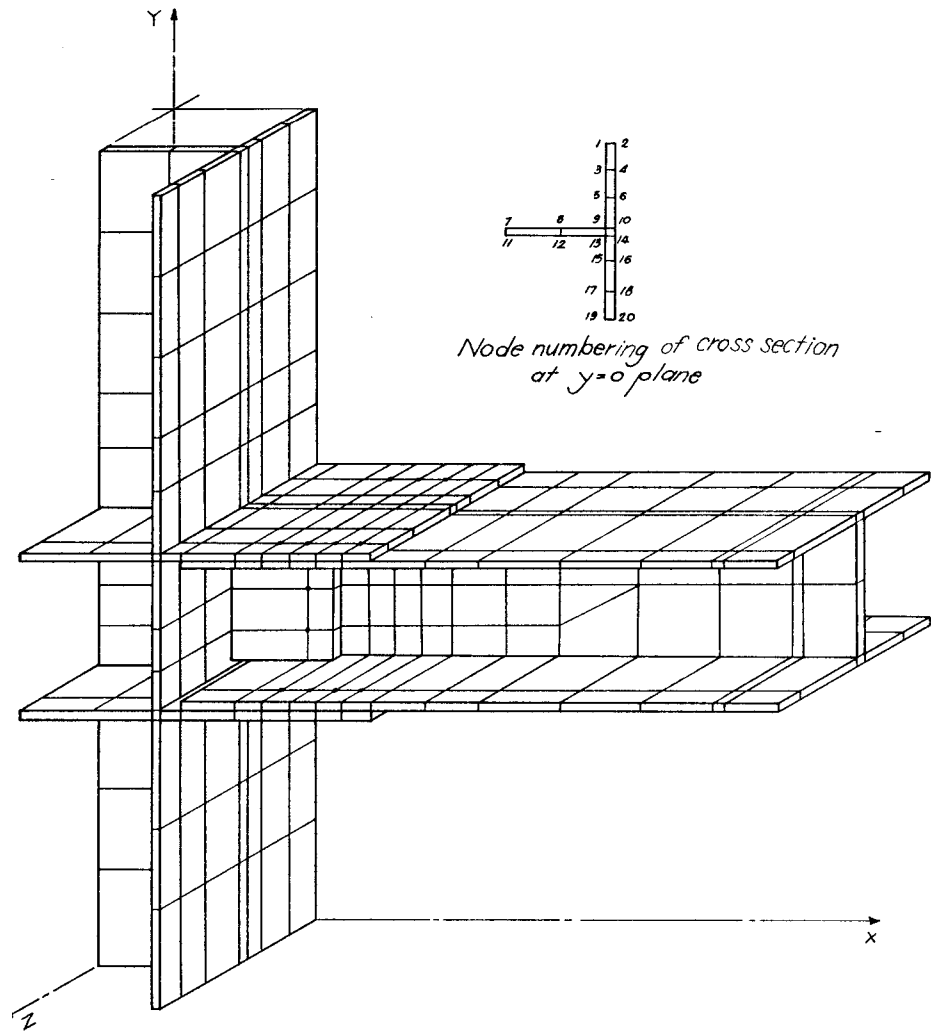


Fig. 3.6 Beam-to-Column Connection Details





(b) Solid Element Model

Fig.3.7 The Finite Element Models of the Beam-to-Column Connection

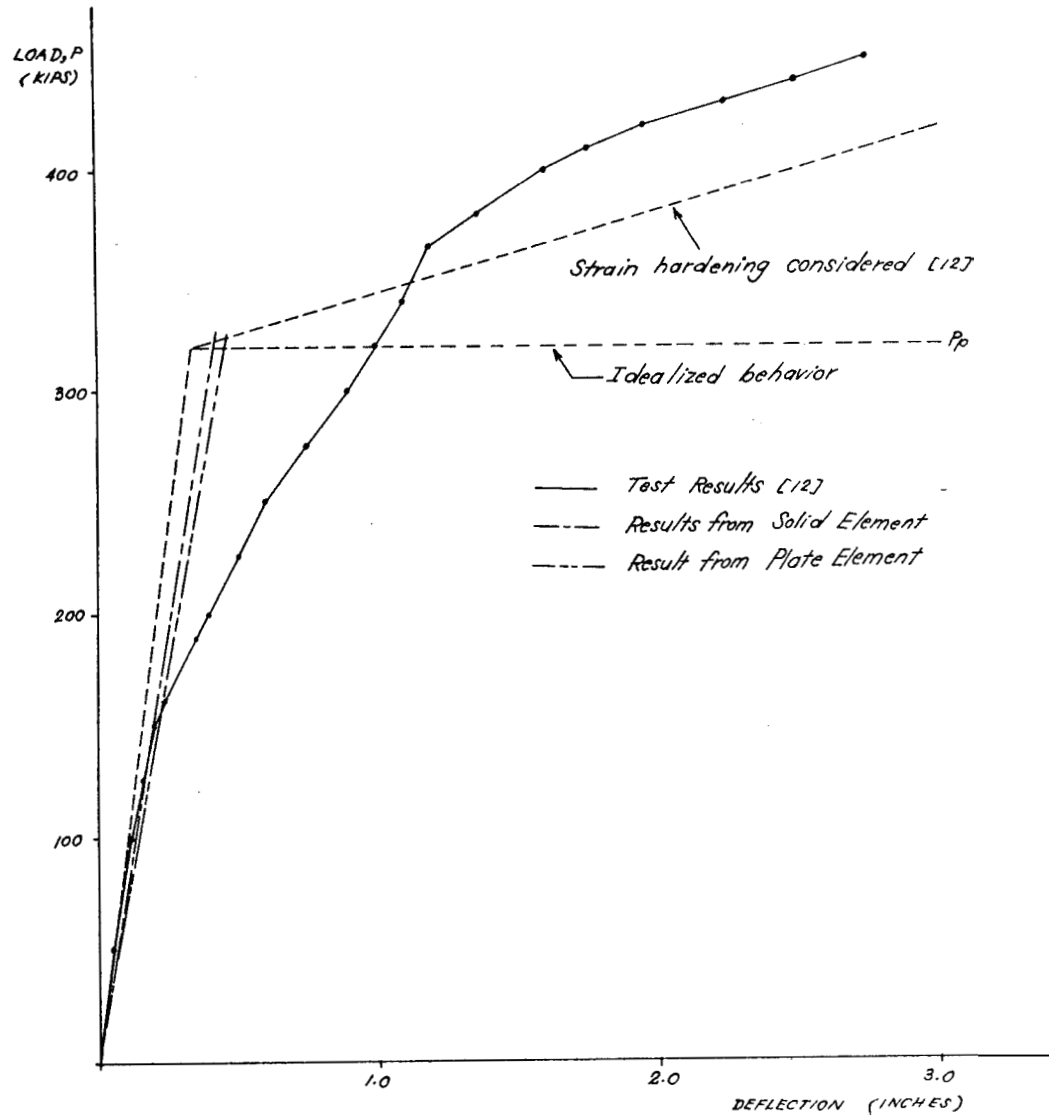


Fig. 3.8 Load-Deflection Behavior of Beam-to-Column Connection (Deflection at the Gage Location in Fig. 3.6)

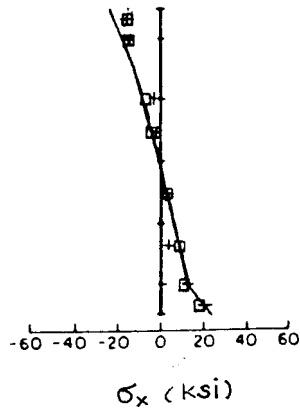


Fig 3.9 Variation of horizontal stress (σ_x) in beam at end of moment plate—

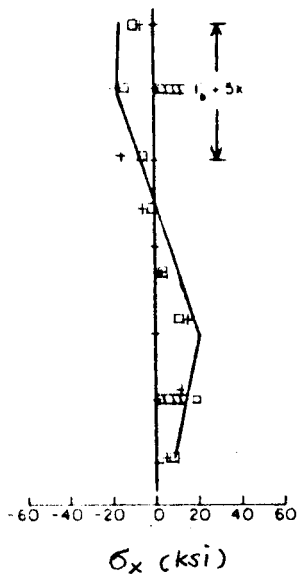


Fig 3.10 .Variation of horizontal stress (σ_x) along column innerface—

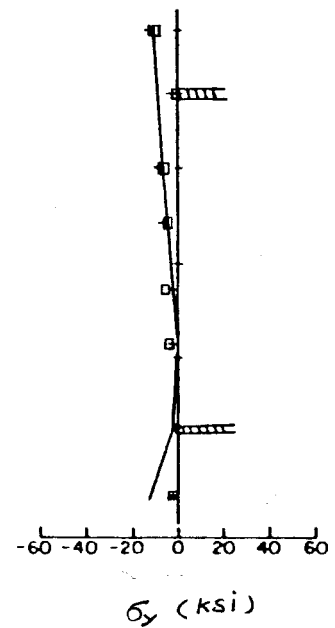


Fig 3.11 -Variation of vertical stress (σ_y) along column innerface—

Note: For Fig. 3.9 to Fig. 3.11, Load, $P = 200$ kips (14)

- Test Results,
- Results from Solid Element,
- + Results from Plate Element.

TABLE 2.1

RESULTS FOR SIMPLE THIN-WALLED CURVED BEAM

(a) Pinned Supported Condition			
Method of Solutions	Deflection, in inches		
	1/4 Span	1/2 Span	3/4 Span
Exact Solution (7)	0.6000	0.7980	0.6000
Three-Plate Beam Element*	0.5899	0.8120	0.5899
Three-Plate Beam Element (6)	0.6470	0.9270	0.0470
(b) Fixed Supported Condition			
Exact Solution (7)	0.00984	0.02000	0.00984
Three-Plate Beam Element*	0.02536	3.03098	0.02536

*From MSC/NASTRAN

TABLE 2.2

BOUNDARY CONDITIONS OF CONTINUOUS DOUBLE-TEE BEAM

Modelling	Fixed Degrees of Freedom* ¹				
	<i>1st Support</i>	<i>2nd Support</i>	<i>3rd Support</i>	<i>4th Support</i>	<i>Every node</i>
Beam Element	<i>1, 2, 3, 5, 6</i>	<i>1, 3, 5, 6</i>	<i>1, 3, 5, 6</i>	<i>1, 3, 5, 6</i>	<i>1, 5, 6</i>
Plate Element* ²	<i>1, 2, 3</i>	<i>1, 3</i>	<i>1, 3</i>	<i>1, 3</i>	<i>1, 5, 6</i>
Solid Element	<i>1, 2, 3, 4, 5, 6</i>	<i>1, 3, 4, 5, 6</i>	<i>1, 3, 4, 5, 6</i>	<i>1, 3, 4, 5, 6</i>	<i>4, 5, 6</i>
Three-Plate Beam Element	<i>1, 2, 3, 5, 6</i>	<i>1, 3, 5, 6</i>	<i>1, 3, 5, 6</i>	<i>1, 3, 5, 6</i>	<i>1, 5, 6</i>

*1 1 = x-translation , 2 = y-translation,
 3 = z-translation , 4 = x-rotation,
 5 = y-rotation , 6 = z-rotation.

*2 In addition to the listed fixed degrees of freedom for the plate element, all the rotations along the axes normal to the plane of the plate are fixed.

RESULTS FOR CONTINUOUS DOUBLE-TEE BEAM SUBJECTED TO SYMMETRICAL LOAD

Methods of Solutions	1/4 Length		1/2 Length		3/4 Length		
	Stress (KN/mm ²) (% Error)		Disp1. (mm)	Stress (KN/mm ²) (% Error)		Stress (KN/mm ²) (% Error)	
	At G	At E&F		At G	At E&F	At G	At E&F
Exact Solution (10)	63.04	- 99.30	5.00×10 ⁴	- 63.04	99.30	63.04	- 99.30
Beam Element	62.57 (-0.74)	- 98.56 (0.74)	5.31×10 ⁴	- 63.27 (- 0.31)	99.67 (0.37)	62.57 (-0.74)	- 98.56 (0.74)
Plate Element	35.87 (-43.10)	- 92.51 (6.84)	5.28×10 ⁴	- 45.74 (27.44)	101.82 (2.45)	42.45 (-32.66)	- 96.63 (2.69)
Solid Elements	61.31 (-2.74)	- 87.31 (12.07)	5.73×10 ⁴	- 55.34 (12.21)	80.75 (-18.68)	49.68 (-21.19)	- 65.88 (33.66)
Three-Plate Beam Element	60.00 (-4.82)	- 94.52 (4.82)	1.76×10 ⁵	- 62.82 (0.35)	98.94 (-0.36)	60.00 (-4.82)	- 94.52 (4.81)

Note: The errors are on the basis of the exact solution (10).

TABLE 2.4

RESULTS FOR CONTINUOUS DOUBLE-TEE BEAM SUBJECTED TO UNSYMMETRICAL LOAD

Methods of Solution	1/4 Length		1/2 Length		3/4 Length		
	Stress (KN/mm ²)		Displ. (mm)	Stress (KN/mm ²)		Stress (KN/mm ²)	
	A+E	A+F		A+E	A+F	A+E	A+F
Exact Solution (10)	-1.11	-197.42	5.00×10^4	1.48	197.12	-1.11	-197.42
Beam Element	-98.56	-98.56	5.31×10^4	99.67	99.67	-98.56	-98.56
Plate Element	-61.77	-161.96	6.08×10^4	36.69	86.45	-6.65	-10.17
Solid Element	-3.72	-115.25	2.50×10^4	0.48	45.55	-0.60	-73.04
Three-Plate Beam Element	-99.30	-99.30	1.76×10^5	99.70	99.70	-99.30	-99.30

TABLE 2.5

-

BOUNDARY CONDITIONS OF HORIZONTAL CONTINUOUS CURVED BEAM

Fixed Degrees of Freedom for Every Modelling

1st Support	2nd Support	3rd Support	4th Support
1,2,3,5	1,2,3,5	1,2,3,5	1,2,3,5

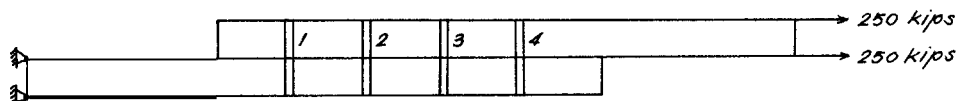
TABLE 2.6
RESULTS FOR CONTINUOUS CURVED BEAM SUBJECTED TO UNIFORMLY DISTRIBUTED LOAD

Methods of Solutions	Mid Pt. of 1st Span		Supports B & C	Mid Pt. of 2nd Span		Mid Pt. of 3rd Span	
	Displ.	B. M.		Displ.	B. M.	Displ.	B. M.
Beam Element (Rect. Coord.)	0.427	119.0	-260.25	0.561	127.0	0.423	117.0
Beam Element (Cylin. Coord.)	0.426	119.0	-261.89	0.565	129.0	0.426	119.0
Three-Plate Beam Element	0.056	118.0	-256.51	0.075	134.0	0.056	118.0
Straight Beam	0.411	122.0	-256.78	0.552	134.0	0.411	122.0
V-Load (11)	-	117.2	-256.24	-	150.0	-	117.2

Note: Displ. = Displacement in z-direction in feet.

B.M. = Bending Moment in Kips-ft.

Table 3.1 SHEAR FORCES IN BOLTS FOR BUTT JOINT



Bolt No.	Shear Forces in Bolts (kips)		
	Calculation*	Plate Element Model	Solid Element Model
1	125	130.18	148.67
2	125	120.74	101.67
3	125	121.05	101.77
4	125	128.03	148.37
Total	500	500.00	500.00

* The simple theory is used for this calculation.

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APPENDIX A

The Input Data of the Beam Analyses for
MSC/NASTRAN

Input Data for Pinned-End Simple Thin-Walled Curved Beam

N A S T R A N E X E C U T I V E C O N T R O L D E C K E C H O

ID CURVE BEAM
SOL 24
TIME 10
CEND

C A S E C O N T R O L D E C K E C H O

CARD COUNT	
1	TITLE=SIMPLE CURVE BEAM USING MPC
2	SUBTITLE=REFER TO "THIN-WALLED CURVED BEAM FEM"
3	DISPLACEMENT=ALL
4	FORCE=ALL
5	SPECFORCE=ALL
6	LOAD=100
7	MPC=1
8	BEGINBULK

INPUT BULK DATA CARD COUNT = 70

CARD COUNT		2	3	4	5	6	7	8	9	10
1	CB	1	1	1	1	1	1	0.		
2	B	1	2	2	2	1	1	0.		
3	B	1	3	3	3	1	1	0.		
4	B	1	4	4	4	1	1	0.		
5	B	1	5	5	5	1	1	0.		
6	B	1	6	6	6	1	1	0.		
7	B	1	7	7	7	1	1	0.		
8	B	1	8	8	8	1	1	0.		
9	B	1	9	9	9	1	1	0.		
10	B	1	10	10	10	1	1	0.		
11	B	1	11	11	11	1	1	0.		
12	B	1	12	12	12	1	1	0.		
13	B	1	13	13	13	1	1	0.		
14	B	1	14	14	14	1	1	0.		
15	B	1	15	15	15	1	1	0.		
16	B	1	16	16	16	1	1	0.		
17	B	1	17	17	17	1	1	0.		
18	B	1	18	18	18	1	1	0.		
19	B	1	19	19	19	1	1	0.		
20	B	1	20	20	20	1	1	0.		
21	B	1	21	21	21	1	1	0.		
22	B	1	22	22	22	1	1	0.		
23	B	1	23	23	23	1	1	0.		
24	B	1	24	24	24	1	1	0.		
25	B	1	25	25	25	1	1	0.		
26	B	1	26	26	26	1	1	0.		
27	B	1	27	27	27	1	1	0.		
28	B	1	28	28	28	1	1	0.		
29	B	1	29	29	29	1	1	0.		
30	B	1	30	30	30	1	1	0.		
31	B	1	31	31	31	1	1	0.		
32	B	1	32	32	32	1	1	0.		
33	B	1	33	33	33	1	1	0.		
34	B	1	34	34	34	1	1	0.		
35	B	1	35	35	35	1	1	0.		
36	B	1	36	36	36	1	1	0.		
37	B	1	37	37	37	1	1	0.		
38	B	1	38	38	38	1	1	0.		
39	B	1	39	39	39	1	1	0.		
40	B	1	40	40	40	1	1	0.		
41	B	1	41	41	41	1	1	0.		
42	B	1	42	42	42	1	1	0.		
43	B	1	43	43	43	1	1	0.		
44	B	1	44	44	44	1	1	0.		
45	B	1	45	45	45	1	1	0.		
46	B	1	46	46	46	1	1	0.		
47	B	1	47	47	47	1	1	0.		
48	B	1	48	48	48	1	1	0.		
49	B	1	49	49	49	1	1	0.		
50	B	1	50	50	50	1	1	0.		
51	B	1	51	51	51	1	1	0.		
52	B	1	52	52	52	1	1	0.		
53	B	1	53	53	53	1	1	0.		
54	B	1	54	54	54	1	1	0.		
55	B	1	55	55	55	1	1	0.		
56	B	1	56	56	56	1	1	0.		
57	B	1	57	57	57	1	1	0.		
58	B	1	58	58	58	1	1	0.		
59	B	1	59	59	59	1	1	0.		
60	B	1	60	60	60	1	1	0.		
61	B	1	61	61	61	1	1	0.		
62	B	1	62	62	62	1	1	0.		
63	B	1	63	63	63	1	1	0.		
64	B	1	64	64	64	1	1	0.		
65	B	1	65	65	65	1	1	0.		
66	B	1	66	66	66	1	1	0.		
67	B	1	67	67	67	1	1	0.		
68	B	1	68	68	68	1	1	0.		
	B	1	69	69	69	1	1	0.		
	B	1	70	70	70	1	1	0.		
	B	1	71	71	71	1	1	0.		
	B	1	72	72	72	1	1	0.		
	B	1	73	73	73	1	1	0.		
	B	1	74	74	74	1	1	0.		
	B	1	75	75	75	1	1	0.		
	B	1	76	76	76	1	1	0.		
	B	1	77	77	77	1	1	0.		
	B	1	78	78	78	1	1	0.		
	B	1	79	79	79	1	1	0.		
	B	1	80	80	80	1	1	0.		
	B	1	81	81	81	1	1	0.		
	B	1	82	82	82	1	1	0.		
	B	1	83	83	83	1	1	0.		
	B	1	84	84	84	1	1	0.		
	B	1	85	85	85	1	1	0.		
	B	1	86	86	86	1	1	0.		
	B	1	87	87	87	1	1	0.		
	B	1	88	88	88	1	1	0.		
	B	1	89	89	89	1	1	0.		
	B	1	90	90	90	1	1	0.		
	B	1	91	91	91	1	1	0.		
	B	1	92	92	92	1	1	0.		
	B	1	93	93	93	1	1	0.		
	B	1	94	94	94	1	1	0.		
	B	1	95	95	95	1	1	0.		
	B	1	96	96	96	1	1	0.		
	B	1	97	97	97	1	1	0.		
	B	1	98	98	98	1	1	0.		
	B	1	99	99	99	1	1	0.		
	B	1	100	100	100	1	1	0.		
	B	1	101	101	101	1	1	0.		
	B	1	102	102	102	1	1	0.		
	B	1	103	103	103	1	1	0.		
	B	1	104	104	104	1	1	0.		
	B	1	105	105	105	1	1	0.		
	B	1	106	106	106	1	1	0.		
	B	1	107	107	107	1	1	0.		
	B	1	108	108	108	1	1	0.		
	B	1	109	109	109	1	1	0.		
	B	1	110	110	110	1	1	0.		
	B	1	111	111	111	1	1	0.		
	B	1	112	112	112	1	1	0.		
	B	1	113	113	113	1	1	0.		
	B	1	114	114	114	1	1	0.		
	B	1	115	115	115	1	1	0.		
	B	1	116	116	116	1	1	0.		
	B	1	117	117	117	1	1	0.		
	B	1	118	118	118	1	1	0.		
	B	1	119	119	119	1	1	0.		
	B	1	120	120	120	1	1	0.		
	B	1	121	121	121	1	1	0.		
	B	1	122	122	122	1	1	0.		
	B	1	123	123	123	1	1	0.		
	B	1	124	124	124	1	1	0.		
	B	1	125	125	125	1	1	0.		
	B	1	126	126	126	1	1	0.		
	B	1	127	127	127	1	1	0.		
	B	1	128	128	128	1	1	0.		
	B	1	129	129	129	1	1	0.		
	B	1	130	130	130	1	1	0.		
	B	1	131	131	131	1	1	0.		
	B	1	132	132	132	1	1	0.		
	B	1	133	133	133	1	1	0.		
	B	1	134	134	134	1	1	0.		
	B	1	135	135	135	1	1	0.		
	B	1	136	136	136	1	1	0.		
	B	1	137	137	137	1	1	0.		
	B	1	138	138	138	1	1	0.		
	B	1	139	139	139	1	1	0.		
	B	1	140	140	140	1	1	0.		
	B	1	141	141	141	1	1	0.		
	B	1	142	142	142	1	1	0.		
	B	1	143	143	143	1	1	0.		
	B	1	144	144	144	1	1	0.		
	B	1	145	145	145	1	1	0.		
	B	1	146	146	146	1	1	0.		
	B	1	147	147	147	1	1	0.		
	B	1	148	148	148	1	1	0.		
	B	1	149	149	149	1	1	0.		
	B	1	150	150	150	1	1	0.		
	B	1	151	151	151	1	1	0.		
	B	1	152	152	152	1	1	0.		
	B	1	153	153	153	1	1	0.		
	B	1	154	154	154	1	1	0.		
	B	1	155	155	155	1	1	0.		
	B	1	156	156	156	1	1	0.		
	B	1	157	157	157	1	1	0.		
	B	1	158	158	158	1	1	0.		
	B	1	159	159	159	1	1	0.		
	B	1	160	160	160	1	1	0.		
	B	1	161	161	161	1	1	0.		
	B	1	162	162	162	1	1	0.		
	B	1	163	163	163	1	1	0.		
	B	1	164	164	164	1	1	0.		
	B	1	165	165	165	1	1	0.		
	B	1	166	166	166	1	1	0.		
	B	1	167	167	167	1	1	0.		
	B	1	168	168	168	1	1	0.		
	B	1	169	169	169	1	1	0.		
	B	1	170	170	170	1	1	0.		
	B	1	171	171	171	1	1	0.		
	B	1	172	172	172	1	1	0.		
	B	1	173	173	173	1	1	0.		
	B	1	174	174	174	1	1	0.		
	B	1	175	175	175	1	1	0.		
	B	1	176	176	176	1	1	0.		
	B	1	1							

, Input Data for Fixed-End **Simple Thin-Wall Curved Beam**

N A S T R A N E X E C U T I V E C O N T R O L D E C K E C H O

ID CURVE BEAM
 SOL 24
 TIME 10
 CEND

C A S E C O N T R O L D E C K E C H O

CARD
 COUNT

1 TITLE=SIMPLE CURVE BEAM USING MPC (BOTH ENDS ARE FIXED)
 2 SUBTITLE=REFER TO "THIN-WALLED CURVED BEAM FEM"
 3 DISPLACEMENT=ALL
 4 FORCE=ALL
 5 SPCFORCE=ALL
 6 LOAD=100
 7 MPC=1
 8 BEGINBULK

INPUT BULK DATA CARD COUNT = 70

CARD COUNT		S	O	R	T	E	D	B	U	L	K	D	A	T	A	E	C	H	O	..	10
1-	CBEAM	1																			
2-	CBEAM	3																			
3-	CBEAM	3																			
4-	CBEAM	4																			
5-	CBEAM	5																			
6-	CBEAM	6																			
7-	CBEAM	7																			
8-	CBEAM	8																			
9-	CBEAM	9																			
10-	CBEAM	10																			
11-	CBEAM	11																			
12-	CBEAM	12																			
13-	CORD1C	33																			
14-	CORD1R	3																			
15-	FORCE	100																			
16-	GRID	1																			
17-	GRID	2																			
18-	GRID	3																			
19-	GRID	4																			
20-	GRID	5																			
21-	GRID	6																			
22-	GRID	7																			
23-	GRID	8																			
24-	GRID	9																			
25-	GRID	10																			
26-	GRID	11																			
27-	GRID	12																			
28-	GRID	13																			
29-	GRID	14																			
30-	GRID	15																			
31-	GRID	16																			
32-	GRID	17																			
33-	GRID	18																			
34-	MAT1	19																			
35-	MPC	1																			
36-	UFC	1																			
37-	MPC	1																			
38-	MPC	1																			
39-	MPC	1																			
40-	MPC	1																			
41-	MPC	1																			
42-	MPC	1																			
43-	MPC	1																			
44-	MPC	1																			
45-	MPC	1																			
46-	MPC	1																			
47-	OPC	1																			
48-	MPC	1																			
49-	MPC	1																			
50-	MPC	1																			
51-	MPC	1																			
52-	MPC	1																			
53-	MPC	1																			
54-	MPC	1																			
55-	MPC	1																			
56-	MPC	1																			
57-	MPC	1																			
58-	MPC	1																			
59-	MPC	1																			
60-	MPC	1																			
61-	MPC	1																			
62-	MPC	1																			
63-	MPC	1																			
64-	MPC	1																			
65-	PBEAM	99																			
66-	PLOAD1	100																			
67-	PLOAD1	100																			
68-	ENDDATA																				

TOTAL COUNT= 69

CARD COUNT		1	2	3	4	5	6	7	8	9	10
1-	CB	1									
2-	BEAM	2									
3-	BEAM	3									
4-	BEAM	4									
5-	BEAM	5									
6-	BEAM	6									
7-	BEAM	7									
8-	BEAM	8									
9-	BEAM	9									
10-	BEAM	10									
11-	BEAM	11									
12-	BEAM	12									
13-	BEAM	13									
14-	BEAM	14									
15-	BEAM	15									
16-	BEAM	16									
17-	BEAM	17									
18-	BEAM	18									
19-	BEAM	19									
20-	BEAM	20									
21-	BEAM	21									
22-	BEAM	22									
23-	BEAM	23									
24-	BEAM	24									
25-	BEAM	25									
26-	BEAM	26									
27-	BEAM	27									
28-	BEAM	28									
29-	BEAM	29									
30-	BEAM	30									
31-	BEAM	31									
32-	BEAM	32									
33-	BEAM	33									
34-	BEAM	34									
35-	BEAM	35									
36-	BEAM	36									
37-	BEAM	37									
38-	BEAM	38									
39-	BEAM	39									
40-	BEAM	40									
41-	BEAM	41									
42-	BEAM	42									
43-	BEAM	43									
44-	BEAM	44									
45-	BEAM	45									
46-	BEAM	46									
47-	BEAM	47									
48-	BEAM	48									
49-	BEAM	49									
50-	BEAM	50									
51-	BEAM	51									
52-	BEAM	52									
53-	BEAM	53									
54-	BEAM	54									
55-	BEAM	55									
56-	BEAM	56									
57-	BEAM	57									
58-	BEAM	58									
59-	BEAM	59									
60-	BEAM	60									
61-	GRDSET	1									
62-	GRID	2									
63-	GRID	3									
64-	GRID	4									
65-	GRID	5									
66-	GRID	6									
67-	GRID	7									
68-	GRID	8									
69-	GRID	9									
70-	GRID	10									
71-	GRID	11									
72-	GRID	12									
73-	GRID	13									
74-	GRID	14									
75-	GRID	15									
76-	GRID	16									
77-	GRID	17									
78-	GRID	18									
79-	GRID	19									
80-	GRID	20									
81-	GRID	21									
82-	GRID	22									
83-	GRID	23									
84-	GRID	24									
85-	GRID	25									
86-	GRID	26									
87-	GRID	27									
88-	GRID	28									
89-	GRID	29									
90-	GRID	30									
91-	GRID	31									
92-	GRID	32									
93-	GRID	33									
94-	GRID	34									
95-	GRID	35									
96-	GRID	36									
97-	GRID	37									
98-	GRID	38									
99-	GRID	39									
100-	GRID	39									

12356
1356

CARD COUNT	1	2	3	4	5	6	7	8	9	10
101-	GRID	40	0.	0.	7800.	0.				
102-	GRID	41	0.	0.	8000.	0.				
103-	GRID	42	0.	0.	8200.	0.				
104-	GRID	43	0.	0.	8400.	0.				
105-	GRID	44	0.	0.	8600.	0.				
106-	GRID	45	0.	0.	8800.	0.				
107-	GRID	46	0.	0.	9000.	0.		1356		
108-	GRID	47	0.	0.	9200.	0.				
109-	GRID	48	0.	0.	9400.	0.				
110-	GRID	49	0.	0.	9600.	0.				
111-	GRID	50	0.	0.	9800.	0.				
112-	GRID	51	0.	0.	10000.	0.				
113-	GRID	52	0.	0.	10200.	0.				
114-	GRID	53	0.	0.	10400.	0.				
115-	GRID	54	0.	0.	10600.	0.				
116-	GRID	55	0.	0.	10800.	0.				
117-	GRID	56	0.	0.	11000.	0.				
118-	GRID	57	0.	0.	11200.	0.				
119-	GRID	58	0.	0.	11400.	0.				
120-	GRID	59	0.	0.	11600.	0.				
121-	GRID	60	0.	0.	11800.	0.				
122-	GRID	61	0.	0.	12000.	0.		1356		
123-	MAT1	19	30.0	3						
124-	PBEAM	9		177500.	7.83E+105	.405E+9	1.24E+8			
125-	PLOAD1	100	16	FZ	LE	0.	-1200.	200.	-1200.	
126-	PLOAD1	100	17	FZ	LE	0.	-1200.	200.	-1200.	
127-	PLOAD1	100	18	FZ	LE	0.	-1200.	200.	-1200.	
128-	PLOAD1	100	19	FZ	LE	0.	-1200.	200.	-1200.	
129-	PLOAD1	100	20	FZ	LE	0.	-1200.	200.	-1200.	
130-	PLOAD1	100	21	FZ	LE	0.	-1200.	200.	-1200.	
131-	PLOAD1	100	22	FZ	LE	0.	-1200.	200.	-1200.	
132-	PLOAD1	100	23	FZ	LE	0.	-1200.	200.	-1200.	
133-	PLOAD1	100	24	FZ	LE	0.	-1200.	200.	-1200.	
134-	PLOAD1	100	25	FZ	LE	0.	-1200.	200.	-1200.	
135-	PLOAD1	100	26	FZ	LE	0.	-1200.	200.	-1200.	
136-	PLOAD1	100	27	FZ	LE	0.	-1200.	200.	-1200.	
137-	PLOAD1	100	28	FZ	LE	0.	-1200.	200.	-1200.	
138-	PLOAD1	100	29	FZ	LE	0.	-1200.	200.	-1200.	
139-	PLOAD1	100	30	FZ	LE	0.	-1200.	200.	-1200.	
140-	PLOAD1	100	31	FZ	LE	0.	-1200.	200.	-1200.	
141-	PLOAD1	100	32	FZ	LE	0.	-1200.	200.	-1200.	
142-	PLOAD1	100	33	FZ	LE	0.	-1200.	200.	-1200.	
143-	PLOAD1	100	34	FZ	LE	0.	-1200.	200.	-1200.	
144-	PLOAD1	100	35	FZ	LE	0.	-1200.	200.	-1200.	
145-	PLOAD1	100	36	FZ	LE	0.	-1200.	200.	-1200.	
146-	PLOAD1	100	37	FZ	LE	0.	-1200.	200.	-1200.	
147-	PLOAD1	100	38	FZ	LE	0.	-1200.	200.	-1200.	
148-	PLOAD1	100	39	FZ	LE	0.	-1200.	200.	-1200.	
149-	PLOAD1	100	40	FZ	LE	0.	-1200.	200.	-1200.	
150-	PLOAD1	100	41	FZ	LE	0.	-1200.	200.	-1200.	
151-	PLOAD1	100	42	FZ	LE	0.	-1200.	200.	-1200.	
152-	PLOAD1	100	43	FZ	LE	0.	-1200.	200.	-1200.	
153-	PLOAD1	100	44	FZ	LE	0.	-1200.	200.	-1200.	
154-	PLOAD1	100	45	FZ	LE	0.	-1200.	200.	-1200.	
	ENDDATA									

TOTAL COUNT- 155

Input Load Data for Double-Tee Beam Using Beam Element
Model Subjected to Unsymmetrical Load

125-	PLOAD1	100	16	FZ	LE	0.	-1200.	200.	-1200.
126-	PLOAD1	100	16	MY	LE	0.	72E+4	200.	72E+4
127-	PLOAD1	100	17	FZ	LE	0.	-1200.	200.	-1200.
128-	PLOAD1	100	17	MY	LE	0.	72E+4	200.	72E+4
129-	PLOAD1	100	18	FZ	LE	0.	-1200.	200.	-1200.
130-	PLOAD1	100	18	MY	LE	0.	72E+4	200.	72E+4
131-	PLOAD1	100	19	FZ	LE	0.	-1200.	200.	-1200.
132-	PLOAD1	100	19	MY	LE	0.	72E+4	200.	72E+4
133-	PLOAD1	100	20	FZ	LE	0.	-1200.	200.	-1200.
134-	PLOAD1	100	20	MY	LE	0.	72E+4	200.	72E+4
135-	PLOAD1	100	21	FZ	LE	0.	-1200.	200.	-1200.
136-	PLOAD1	100	21	MY	LE	0.	72E+4	200.	72E+4
137-	PLOAD1	100	22	FZ	LE	0.	-1200.	200.	-1200.
138-	PLOAD1	100	22	MY	LE	0.	72E+4	200.	72E+4
139-	PLOAD1	100	23	FZ	LE	0.	-1200.	200.	-1200.
140-	PLOAD1	100	23	MY	LE	0.	72E+4	200.	72E+4
141-	PLOAD1	100	24	FZ	LE	0.	-1200.	200.	-1200.
142-	PLOAD1	100	24	MY	LE	0.	72E+4	200.	72E+4
143-	PLOAD1	100	25	FZ	LE	0.	-1200.	200.	-1200.
144-	PLOAD1	100	25	MY	LE	0.	72E+4	200.	72E+4
145-	PLOAD1	100	26	FZ	LE	0.	-1200.	200.	-1200.
146-	PLOAD1	100	26	MY	LE	0.	72E+4	200.	72E+4
147-	PLOAD1	100	27	FZ	LE	0.	-1200.	200.	-1200.
148-	PLOAD1	100	27	MY	LE	0.	72E+4	200.	72E+4
149-	PLOAD1	100	28	FZ	LE	0.	-1200.	200.	-1200.
150-	PLOAD1	100	28	MY	LE	0.	72E+4	200.	72E+4
151-	PLOAD1	100	29	FZ	LE	0.	-1200.	200.	-1200.
152-	PLOAD1	100	29	MY	LE	0.	72E+4	200.	72E+4
153-	PLOAD1	100	30	FZ	LE	0.	-1200.	200.	-1200.
154-	PLOAD1	100	30	MY	LE	0.	72E+4	200.	72E+4
155-	PLOAD1	100	31	FZ	LE	0.	-1200.	200.	-1200.
156-	PLOAD1	100	31	MY	LE	0.	72E+4	200.	72E+4
157-	PLOAD1	100	32	FZ	LE	0.	-1200.	200.	-1200.
158-	PLOAD1	100	32	MY	LE	0.	72E+4	200.	72E+4
159-	PLOAD1	100	33	FZ	LE	0.	-1200.	200.	-1200.
160-	PLOAD1	100	33	MY	LE	0.	72E+4	200.	72E+4
161-	PLOAD1	100	34	FZ	LE	0.	-1200.	200.	-1200.
162-	PLOAD1	100	34	MY	LE	0.	72E+4	200.	72E+4
163-	PLOAD1	100	35	FZ	LE	0.	-1200.	200.	-1200.
164-	PLOAD1	100	35	MY	LE	0.	72E+4	200.	72E+4
165-	PLOAD1	100	36	FZ	LE	0.	-1200.	200.	-1200.
166-	PLOAD1	100	36	MY	LE	0.	72E+4	200.	72E+4
167-	PLOAD1	100	37	FZ	LE	0.	-1200.	200.	-1200.
168-	PLOAD1	100	37	MY	LE	0.	72E+4	200.	72E+4
169-	PLOAD1	100	38	FZ	LE	0.	-1200.	200.	-1200.
170-	PLOAD1	100	38	MY	LE	0.	72E+4	200.	72E+4
171-	PLOAD1	100	39	FZ	LE	0.	-1200.	200.	-1200.
172-	PLOAD1	100	39	MY	LE	0.	72E+4	200.	72E+4
173-	PLOAD1	100	40	FZ	LE	0.	-1200.	200.	-1200.
174-	PLOAD1	100	40	MY	LE	0.	72E+4	200.	72E+4
175-	PLOAD1	100	41	FZ	LE	0.	-1200.	200.	-1200.
176-	PLOAD1	100	41	MY	LE	0.	72E+4	200.	72E+4
177-	PLOAD1	100	42	FZ	LE	0.	-1200.	200.	-1200.
178-	PLOAD1	100	42	MY	LE	0.	72E+4	200.	72E+4
179-	PLOAD1	100	43	FZ	LE	0.	-1200.	200.	-1200.
180-	PLOAD1	100	43	MY	LE	0.	72E+4	200.	72E+4
181-	PLOAD1	100	44	FZ	LE	0.	-1200.	200.	-1200.
182-	PLOAD1	100	44	MY	LE	0.	72E+4	200.	72E+4
183-	PLOAD1	100	45	FZ	LE	0.	-1200.	200.	-1200.
184-	PLOAD1	100	45	MY	LE	0.	72E+4	200.	72E+4

Note: All other input data are the same as in symmetrical load case.

Input Data for Double-Tee Beam Using **Plate** Element Model
Subjected to Symmetrical Load

NASTRAN EXECUTIVE CONTROL DECK ECHO

ID THESIS,WIN34
SOL 24
TIME 10
CEYD

CASE CONTROL DECK ECHO

CARD
COUNT

1 TITLE=DOUBLE TEE BEAM.
2 SUBTITLE=SUBJECTED TO UNSYMMETRIC UNIFORM LOAD USING PLANE STRESS.
3 LOAD=100
4 ELFORCE=ALL
5 SPCFORCE=ALL
6 STRESS=ALL
7 DISPLACEMENT=ALL
8 BEGIN BULK

INPUT BULK DATA CARD COUNT = 875

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1-	CQUAD4	1	9	4	1	8	11			
2-	CQUAD4	2	9	6	2	9	13			
3-	CQUAD4	3	9	4	3	10	11			
4-	CQUAD4	4	9	5	4	11	12			
5-	CQUADU	5	9	5	5	12	13			
6-	CQUAD4	6	9	7	6	13	14			
7-	CQUAD4	7	9	11	8	15	18			
8-	CQUAD4	8	9	13	9	16	20			
9-	CQUAD4	9	9	11	10	17	19			
10-	CQUADU	10	9	12	11	18	20			
11-	CQUAD4	11	9	13	12	19	21			
12-	CQUAD4	12	9	14	13	20	25			
13-	CQUAD4	13	9	18	15	22	25			
14-	CQUAD4	14	9	20	16	23	27			
15-	CQUAD4	15	9	18	17	24	25			
16-	CQUAD4	16	9	19	18	25	26			
17-	CQUAW	17	9	20	19	26	27			
18-	CQUAD4	18	9	21	20	27	28			
19-	CQUADU	19	9	25	22	29	32			
20-	CQUAD4	20	9	27	23	30	34			
21-	CQUAD4	21	9	25	24	31	32			
22-	CQUAD4	22	9	26	25	32	33			
23-	CQUADU	23	9	27	26	33	34			
24-	CQUAD4	24	9	28	27	34	35			
25-	CQUAD4	25	9	32	29	36	39			
26-	CQUAD4	26	9	34	30	37	41			
27-	CQUAD4	27	9	32	31	38	39			
28-	CQUADU	28	9	33	32	39	40			
29-	CQUAD4	29	9	34	33	40	41			
30-	CQUAD4	30	9	35	34	41	42			
31-	CQUAD4	31	9	39	36	43	46			
32-	CQUAD4	32	9	41	37	44	48			
33-	CQUAD4	33	9	39	38	45	46			
34-	CQUAD4	34	9	40	39	46	47			
35-	CQUAD4	35	9	41	40	47	48			
36-	CQUAD4	36	9	42	41	48	49			
37-	CQUAD4	37	9	46	43	50	53			
38-	CQUAD4	38	9	48	44	51	55			
39-	CQUAD4	39	9	46	45	52	53			
40-	CQUAD4	40	9	47	46	53	54			
41-	CQUAD4	41	9	48	47	54	55			
42-	CQUAD4	42	9	49	48	55	56			
43-	CQUADU	43	9	53	50	57	60			
44-	CQUAD4	44	9	55	51	58	62			
45-	CQUAD4	45	9	53	52	59	60			
46-	CQUAD4	46	9	54	53	60	61			
47-	CQUADU	47	9	55	54	61	62			
48-	CQUAD4	48	9	56	55	62	63			
49-	CQUAD4	49	9	60	57	64	67			
50-	CQUAD4	50	9	62	58	65	69			
51-	CQUADU	51	9	60	59	66	67			
52-	CQUAD4	52	9	61	60	67	68			
53-	CQUAD4	53	9	62	61	68	69			
54-	CQUAD4	54	9	63	62	69	70			
55-	CQUAD4	55	9	67	64	71	74			
56-	CQUADU	56	9	69	65	72	76			
57-	CQUADU	57	9	67	66	73	74			
58-	CQUAD4	58	9	68	67	74	75			
59-	CQUAD4	59	9	69	68	75	76			
60-	CQUAD4	60	9	70	69	76	77			
61-	CQUADU	61	9	74	71	78	81			
62-	CQUAD4	62	9	76	72	79	83			
63-	CQUAD4	63	9	74	73	80	81			
64-	CQUAD4	64	9	75	74	81	82			
65-	CQUAD4	65	9	76	75	82	83			
66-	CQUAD4	66	9	77	76	83	84			
67-	CQUAD4	67	9	81	78	85	88			
68-	CQUAD4	68	9	83	79	86	90			
69-	CQUAD4	69	9	81	80	87	88			
70-	CQUAD4	70	9	82	81	88	89			
71-	CQUADU	71	9	83	82	89	90			
72-	CQUAD4	72	9	84	83	90	91			
73-	CQUAD4	73	9	88	85	92	95			
74-	CQUAD4	74	9	90	86	93	97			
75-	CQUAD4	75	9	88	87	94	95			
76-	CQUAD4	76	9	89	88	95	96			
77-	CQUAD4	77	9	90	89	96	97			
78-	CQUAD4	78	9	91	90	97	98			
79-	CQUAD4	79	9	95	92	99	102			
80-	CQUAD4	80	9	97	93	100	104			
81-	CQUAD4	81	9	95	94	101	102			
82-	CQUAD4	82	9	96	95	102	103			
83-	CQUADU	83	9	97	96	103	104			
84-	CQUAD4	84	9	98	97	104	105			
85-	CQUAD4	85	9	102	99	106	109			
86-	CQUAD4	86	9	104	100	107	111			
87-	CQUADU	87	9	102	101	108	109			
88-	CQUAD4	88	9	103	102	109	110			
89-	CQUAD4	89	9	104	103	110	111			
90-	CQUADU	90	9	105	104	111	112			
91-	CQUAD4	91	9	109	106	113	116			
92-	CQUAD4	92	9	111	107	114	118			
93-	CQUAD4	93	9	109	108	115	116			
94-	CQUAD4	94	9	110	109	116	117			
95-	CQUAD4	95	9	111	110	117	118			
96-	CQUAD4	96	9	112	111	118	119			
97-	CQUAD4	97	9	116	113	120	123			
98-	CQUAD4	98	9	118	114	121	125			
99-	CQUAD4	99	9	116	115	122	123			
100-	CQUAD4	100	9	117	116	123	124			

S O R T E D B U L K D A T A E C H O

CARD COUNT	1	2	3	4	5	6	7	8	9	10
101-	CQUAD4	101	9	118	117	124	25			
102-	CQUADU	102	9	119	118	125	26			
103-	CQUADU	103	9	123	120	127	30			
104-	CQUADU	104	9	125	121	128	32			
105-	CQUADU	105	9	123	122	129	30			
106-	CQUADU	106	9	124	123	130	31			
107-	CQUADU	107	9	125	124	131	32			
108-	CQUADU	108	9	126	125	132	33			
109-	CQUADU	109	9	130	127	134	37			
110-	CQUADU	110	9	132	128	135	39			
111-	CQUADU	111	9	130	129	136	38			
112-	CQUADU	112	9	131	130	137	38			
113-	CQUADU	113	9	132	131	138	39			
114-	CQUAD4	114	9	133	132	139	40			
115-	CQUAD4	115	9	133	134	141	44			
116-	CQUADU	116	9	139	135	142	46			
117-	CQUADU	117	9	137	136	143	44			
118-	CQUAD4	118	9	138	137	144	45			
119-	CQUAD4	119	9	139	138	145	46			
120-	CQUAD4	120	9	140	139	146	47			
121-	CQUAD4	121	9	144	141	148	51			
122-	CQUADU	122	9	146	142	149	53			
123-	CQUADU	123	9	144	143	150	51			
124-	CQUAD4	124	9	145	144	151	52			
125-	CQUAD4	125	9	146	145	152	53			
126-	CQUADU	126	9	147	146	153	54			
127-	CQUAD4	127	9	151	148	155	58			
128-	CQUADU	128	9	153	149	156	60			
129-	CQUADU	129	9	151	150	157	58			
130-	CQUADU	130	9	152	151	158	59			
131-	CQUADU	131	9	153	152	159	60			
132-	CQUAD4	132	9	154	153	160	61			
133-	CQUADU	133	9	158	155	162	65			
134-	CQUADU	134	9	160	156	163	67			
135-	CQUADU	135	9	158	157	164	65			
136-	CQUADU	136	9	159	158	165	66			
137-	CQUADU	137	9	160	159	166	67			
138-	CQUADU	138	9	161	160	167	68			
139-	CQUADU	139	9	165	162	169	72			
140-	CQUADU	140	9	167	163	170	72			
141-	CQUAD4	141	9	165	164	171	72			
142-	CQUADU	142	9	166	165	172	74			
143-	CQUAD4	143	9	167	166	173	74			
144-	CQUADU	144	9	168	167	174	75			
145-	CQUAD4	145	9	172	169	176	79			
146-	CQUADU	146	9	174	170	177	81			
147-	CQUADU	147	9	172	171	178	79			
148-	CQUADU	148	9	173	172	179	80			
149-	CQUADU	149	9	174	173	180	81			
150-	CQUAD4	150	9	175	174	181	82			
151-	CQUADU	151	9	179	176	183	86			
152-	CQUAD4	152	9	181	177	184	88			
153-	CQUADU	153	9	179	178	185	86			
154-	CQUAD4	154	9	180	179	186	87			
155-	CQUAD4	155	9	181	180	187	88			
156-	CQUAD4	156	9	182	181	188	89			
157-	CQUADU	157	9	186	183	190	93			
158-	CQUAD4	158	9	188	184	191	95			
159-	CQUADU	159	9	186	185	192	93			
160-	CQUADU	160	9	187	186	193	94			
161-	CQUADU	161	9	188	187	194	95			
162-	CQUADU	162	9	189	188	195	96			
163-	CQUADU	163	9	193	190	197	200			
164-	CQUAD4	164	9	195	191	198	202			
165-	CQUADU	165	9	193	192	199	200			
166-	CQUADU	166	9	194	193	200	201			
167-	CQUADU	167	9	195	194	201	202			
168-	CQUADU	168	9	196	195	202	203			
169-	CQUADU	169	9	200	197	204	207			
170-	CQUADU	170	9	202	198	205	209			
171-	CQUAD4	171	9	200	199	206	207			
172-	CQUADU	172	9	201	200	207	208			
173-	CQUADU	173	9	202	201	208	209			
174-	CQUAD4	174	9	203	202	209	210			
175-	CQUAD4	175	9	207	204	211	214			
176-	CQUADU	176	9	209	205	212	216			
177-	CQUAD4	177	9	207	206	213	214			
178-	CQUADU	178	9	208	207	214	215			
179-	CQUAD4	179	9	209	208	215	216			
180-	CQUAD4	180	9	210	209	216	217			
181-	CQUADU	181	9	214	211	218	221			
182-	CQUADU	182	9	216	212	219	223			
183-	CQUADU	183	9	214	213	220	221			
184-	CQUADU	184	9	215	214	221	222			
185-	CQUADU	185	9	216	215	222	223			
186-	CQUADU	186	9	217	216	223	224			
187-	CQUADU	187	9	221	218	225	228			
188-	CQUADU	188	9	223	219	226	230			
189-	CQUADU	189	9	222	220	227	228			
190-	CQUAD4	190	9	222	221	228	229			
191-	CQUAD4	191	9	224	222	229	230			
192-	CQUADU	192	9	224	223	230	231			
193-	CQUAD4	193	9	228	225	232	235			
194-	CQUADU	194	9	230	226	233	237			
195-	CQUAD4	195	9	238	227	234	235			
196-	CQUADU	196	9	239	228	235	237			
197-	CQUADU	197	9	230	229	236	237			
198-	CQUADU	198	9	231	230	237	238			
199-	CQUADU	199	9	235	232	239	242			
200-	CQUADU	200	9	237	233	240	244			

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	6	7	8	9	10
201-	CQUAD4	201	9	235	234	241	242		
202-	CQUAD4	202	9	236	235	242	243		
203-	CQUAD4	203	9	237	236	243	244		
204-	CQUAD4	204	9	238	237	244	245		
205-	CQUADU	205	9	242	239	246	249		
206-	CQUADU	206	9	244	240	247	251		
207-	CQUAD4	207	9	242	241	248	249		
208-	CQUAD4	208	9	243	242	249	250		
209-	CQUADU	209	9	244	243	250	251		
210-	CQUADU	210	9	245	244	251	252		
211-	CQUADU	211	9	249	246	253	256		
212-	CQUADU	212	9	251	247	254	258		
213-	CQUAD4	213	9	249	248	255	256		
214-	CQUADU	214	9	250	249	256	257		
215-	CQUADU	215	9	251	250	257	258		
216-	CQUADU	216	9	252	251	258	259		
217-	CQUAD4	217	9	256	253	260	262		
218-	CQUAD4	218	9	258	255	261	263		
219-	CQUADU	219	9	256	255	262	263		
220-	CQUAD4	220	9	257	257	264	264		
221-	CQUAD4	221	9	258	257	264	265		
222-	CQUADU	222	9	259	258	265	266		
223-	CQUADU	223	9	263	260	267	270		
224-	CQUADU	224	9	265	261	268	272		
225-	CQUAD4	225	9	263	262	269	270		
226-	CQUADU	226	9	264	263	270	271		
227-	CQUADU	227	9	265	264	271	272		
228-	CQUADU	228	9	266	265	272	273		
229-	CQUADU	229	9	270	267	274	277		
230-	CQUADU	230	9	272	268	275	279		
231-	CQUADU	231	9	270	269	276	277		
232-	CQUADU	232	9	271	270	277	278		
233-	CQUAD4	233	9	272	271	278	279		
234-	CQUADU	234	9	273	272	279	280		
235-	CQUADU	235	9	277	274	281	284		
236-	CQUADU	236	9	279	275	282	286		
237-	CQUAD4	237	9	277	276	283	284		
238-	CQUADU	238	9	278	277	284	285		
239-	CQUADU	239	9	279	278	285	286		
240-	CQUAD4	240	9	280	279	286	287		
241-	CQUADU	241	9	284	281	288	291		
242-	CQUAD4	242	9	286	282	289	293		
243-	CQUADU	243	9	284	283	290	291		
244-	CQUADU	244	9	285	284	291	292		
245-	CQUAD4	245	9	286	285	292	293		
246-	CQUADU	246	9	287	286	293	294		
247-	CQUADU	247	9	291	288	295	298		
248-	CQUADU	248	9	293	289	296	300		
249-	CQUAD4	249	9	292	290	297	298		
250-	CQUADU	250	9	292	291	298	299		
251-	CQUADU	251	9	293	292	299	300		
252-	CQUADU	252	9	294	293	300	301		
253-	CQUADU	253	9	298	295	302	305		
254-	CQUADU	254	9	300	296	303	307		
255-	CQUADU	255	9	299	297	304	305		
256-	CQUADU	256	9	299	298	305	306		
257-	CQUADU	257	9	300	299	306	307		
258-	CQUADU	258	9	300	300	307	308		
259-	CQUADU	259	9	305	302	309	310		
260-	CQUAD4	260	9	307	303	310	314		
261-	CQUAD4	261	9	305	304	311	312		
262-	CQUADU	262	9	306	305	312	313		
263-	CQUAD4	263	9	307	306	313	314		
264-	CQUAD4	264	9	308	307	314	315		
265-	CQUADU	265	9	312	309	316	319		
266-	CQUAD4	266	9	314	310	317	321		
267-	CQUADU	267	9	312	311	318	319		
268-	CQUAD4	268	9	313	312	319	320		
269-	CQUADU	269	9	314	313	320	321		
270-	CQUADU	270	9	315	314	321	322		
271-	CQUAD4	271	9	319	316	323	326		
272-	CQUADU	272	9	321	317	324	328		
273-	CQUADU	273	9	319	318	325	326		
274-	CQUADU	274	9	320	319	326	327		
275-	CQUADU	275	9	321	320	327	328		
276-	CQUADU	276	9	322	321	328	329		
277-	CQUADU	277	9	326	323	330	333		
278-	CQUAD4	278	9	328	324	331	335		
279-	CQUADU	279	9	326	325	332	333		
280-	CQUADU	280	9	327	326	333	334		
281-	CQUADU	281	9	328	327	334	335		
282-	CQUADU	282	9	329	328	335	336		
283-	CQUADU	283	9	333	330	337	340		
284-	CQUADU	284	9	335	331	338	342		
285-	CQUADU	285	9	333	332	339	340		
286-	CQUADU	286	9	334	333	340	341		
287-	CQUADU	287	9	335	334	341	342		
288-	CQUADU	288	9	336	335	342	343		
289-	CQUADU	289	9	340	337	344	347		
290-	CQUAD4	290	9	342	338	345	349		
291-	CQUAD4	291	9	340	339	346	348		
292-	CQUADU	292	9	341	340	347	349		
293-	CQUAD4	293	9	342	341	348	350		
294-	CQUADU	294	9	343	342	349	350		
295-	CQUAD4	295	9	347	344	351	354		
296-	CQUADU	296	9	349	345	352	356		
297-	CQUADU	297	9	347	346	353	354		
298-	CQUADU	298	9	348	347	354	355		
299-	CQUAD4	299	9	349	348	355	356		
300-	CQUAD4	300	9	350	349	356	357		

CARD COUNT	1	2	3	4	5	6	7	8	9	10
301-	CQUAD4	301	99	354	351	58	361			
302-	CQUADU	302	99	356	352	59	363			
303-	CQUAD4	303	99	354	353	60	361			
304-	CQUADU	304	99	355	354	61	362			
305-	CQUADU	305	99	356	355	62	363			
306-	CQUADU	306	99	357	356	63	364			
307-	CQUADU	307	99	361	358	65	368			
308-	CQUADU	308	99	363	359	66	370			
309-	CQUADU	309	99	361	360	67	368			
310-	CQUADU	310	99	362	361	68	369			
311-	CQUADU	311	99	363	362	69	370			
312-	CQUAD4	312	99	364	363	70	371			
313-	CQUADU	313	99	368	365	72	375			
314-	CQUAD4	314	99	370	366	73	377			
315-	CQUADU	315	99	368	367	74	375			
316-	CQUADU	316	99	369	368	75	376			
317-	CQUAD4	317	99	370	369	76	377			
318-	CQUAD4	318	99	371	370	77	378			
319-	CQUADU	319	99	375	372	79	382			
320-	CQUADU	320	99	377	373	80	383			
321-	CQUADU	321	99	376	374	81	382			
322-	CQUADU	322	99	377	375	82	383			
323-	CQUADU	323	99	378	376	83	384			
324-	CQUADU	324	99	379	377	84	385			
325-	CQUADU	325	99	382	379	86	389			
326-	CQUAD4	326	99	384	380	87	391			
327-	CQUAD4	327	99	382	381	88	389			
328-	CQUAD4	328	99	383	382	89	390			
329-	CQUAD4	329	99	384	383	90	391			
330-	CQUADU	330	99	385	384	91	392			
331-	CQUADU	331	99	389	386	93	396			
332-	CQUADU	332	99	391	387	94	398			
333-	CQUADU	333	99	389	388	95	396			
334-	CQUADU	334	99	390	389	96	397			
335-	CQUADU	335	99	391	390	97	398			
336-	CQUAD4	336	99	392	391	98	399			
337-	CQUAD4	337	99	396	393	400	403			
338-	CQUADU	338	99	398	394	401	405			
339-	CQUADU	339	99	396	395	402	U03			
340-	CQUAD4	340	99	397	396	403	404			
341-	CQUADU	341	99	398	397	404	405			
342-	CQUADU	342	99	399	398	405	406			
343-	CQUADU	343	99	403	400	407	410			
344-	CQUADU	344	99	405	401	408	412			
345-	CQUAD4	345	99	403	402	409	410			
346-	CQUADU	346	99	404	403	410	411			
347-	CQUADU	347	99	405	404	411	412			
348-	CQUADU	348	99	406	405	412	U13			
349-	CQUAD4	349	99	410	407	414	417			
350-	CQUAD4	350	99	412	408	415	419			
351-	CQUAD4	351	99	410	409	416	417			
352-	CQUAD4	352	99	411	410	417	418			
353-	CQUAD4	353	99	412	411	418	419			
354-	CQUAD4	354	99	413	412	419	420			
355-	CQUAD4	355	99	417	414	421	420			
356-	CQUAD4	356	99	419	415	422	426			
357-	CQUAD4	357	99	417	416	423	424			
358-	CQUADU	358	99	418	417	424	425			
359-	CQUAD4	359	99	419	418	425	426			
360-	CQUAD4	360	99	420	419	426	427			
361-	FORCE	100	109		-60000.0	0.	0.		1.	
362-	FORCE	100	111		-60000.0	0.	0.		1.	
363-	FORCE	100	116		-120000.0	0.	0.		1.	
364-	FORCE	100	123		-120000.0	0.	0.		1.	
365-	FORCE	100	125		-120000.0	0.	0.		1.	
366-	FORCE	100	130		-120000.0	0.	0.		1.	
367-	FORCE	100	132		-120000.0	0.	0.		1.	
368-	FORCE	100	137		-120000.0	0.	0.		1.	
369-	FORCE	100	139		-120000.0	0.	0.		1.	
370-	FORCE	100	144		-120000.0	0.	0.		1.	
371-	FORCE	100	146		-120000.0	0.	0.		1.	
372-	FORCE	100	151		-120000.0	0.	0.		1.	
373-	FORCE	100	153		-120000.0	0.	0.		1.	
374-	FORCE	100	158		-120000.0	0.	0.		1.	
375-	FORCE	100	160		-120000.0	0.	0.		1.	
376-	FORCE	100	165		-120000.0	0.	0.		1.	
377-	FORCE	100	167		-120000.0	0.	0.		1.	
378-	FORCE	100	172		-120000.0	0.	0.		1.	
379-	FORCE	100	174		-120000.0	0.	0.		1.	
380-	FORCE	100	179		-120000.0	0.	0.		1.	
381-	FORCE	100	181		-120000.0	0.	0.		1.	
382-	FORCE	100	186		-120000.0	0.	0.		1.	
383-	FORCE	100	188		-120000.0	0.	0.		1.	
384-	FORCE	100	193		-120000.0	0.	0.		1.	
385-	FORCE	100	195		-120000.0	0.	0.		1.	
386-	FORCE	100	200		-120000.0	0.	0.		1.	
387-	FORCE	100	202		-120000.0	0.	0.		1.	
388-	FORCE	100	207		-120000.0	0.	0.		1.	
389-	FORCE	100	209		-120000.0	0.	0.		1.	
390-	FORCE	100	214		-120000.0	0.	0.		1.	
391-	FORCE	100	216		-120000.0	0.	0.		1.	
392-	FORCE	100	221		-120000.0	0.	0.		1.	
393-	FORCE	100	223		-120000.0	0.	0.		1.	
394-	FORCE	100	228		-120000.0	0.	0.		1.	
395-	FORCE	100	230		-120000.0	0.	0.		1.	
396-	FORCE	100	235		-120000.0	0.	0.		1.	
397-	FORCE	100	237		-120000.0	0.	0.		1.	
398-	FORCE	100	242		-120000.0	0.	0.		1.	
399-	FORCE	100	244		-120000.0	0.	0.		1.	
400-	FORCE	100	244		-120000.0	0.	0.		1.	

CARD COUNT	1	2	3	4	5	6	7	8	9	10
401-	FORCE	100	249		-120000.0	0.	0.	1.		
402-	FORCE	100	251		-120000.0	0.	0.	1.		
403-	FORCE	100	256		-120000.0	0.	0.	1.		
404-	FORCE	100	258		-120000.0	0.	0.	1.		
405-	FORCE	100	263		-120000.0	0.	0.	1.		
406-	FORCE	100	265		-120000.0	0.	0.	1.		
407-	FORCE	100	270		-120000.0	0.	0.	1.		
408-	FORCE	100	272		-120000.0	0.	0.	1.		
409-	FORCE	100	277		-120000.0	0.	0.	1.		
410-	FORCE	100	279		-120000.0	0.	0.	1.		
411-	FORCE	100	284		-120000.0	0.	0.	1.		
412-	FORCE	100	286		-120000.0	0.	0.	1.		
413-	FORCE	100	291		-120000.0	0.	0.	1.		
414-	FORCE	100	293		-120000.0	0.	0.	1.		
415-	FORCE	100	298		-120000.0	0.	0.	1.		
416-	FORCE	100	300		-120000.0	0.	0.	1.		
417-	FORCE	100	305		-120000.0	0.	0.	1.		
418-	FORCE	100	307		-120000.0	0.	0.	1.		
419-	FORCE	100	312		-120000.0	0.	0.	1.		
420-	FORCE	100	314		-120000.0	0.	0.	1.		
421-	FORCE	100	319		-60000.0	0.	0.	1.		
422-	FORCE	100	321		-60000.0	0.	0.	1.		
423-	GRDSET							1236		
424-	GRID	1		600.	0.	0.		1236		
425-	GRID	2		-600.	0.	0.		1236		
426-	GRID	3		1200.	0.	600.		1236		
427-	GRID	4		600.	0.	600.		1236		
428-	GRID	5		0.	0.	600.		1236		
429-	GRID	6		-600.	0.	600.		1236		
430-	GRID	7		-1200.	0.	600.		1236		
431-	GRID	8		600.	200.	0.				
432-	GRID	9		-600.	200.	0.				
433-	GRID	10		1200.	200.	600.				
434-	GRID	11		600.	200.	600.				
435-	GRID	12		0.	200.	600.				
436-	GRID	13		-600.	200.	600.				
437-	GRID	14		-1200.	200.	600.				
438-	GRID	15		600.	400.	0.				
439-	GRID	16		-600.	400.	0.				
440-	GRID	17		1200.	400.	600.				
441-	GRID	18		600.	400.	600.				
442-	GRID	19		0.	400.	600.				
443-	GRID	20		-600.	400.	600.				
444-	GRID	21		-1200.	400.	600.				
445-	GRID	22		600.	600.	0.				
446-	GRID	23		-600.	600.	0.				
447-	GRID	24		1200.	600.	600.				
448-	GRID	25		600.	600.	600.				
449-	GRID	26		0.	600.	600.				
450-	GRID	27		-600.	600.	600.				
451-	GRID	28		-1200.	600.	600.				
452-	GRID	29		600.	800.	0.				
453-	GRID	30		-600.	800.	0.				
454-	GRID	31		1200.	800.	600.				
455-	GRID	32		600.	800.	600.				
456-	GRID	33		0.	800.	600.				
457-	GRID	34		-600.	800.	600.				
458-	GRID	35		-1200.	800.	600.				
459-	GRID	36		600.	1000.	0.				
460-	GRID	37		-600.	1000.	0.				
461-	GRID	38		1200.	1000.	600.				
462-	GRID	39		600.	1000.	600.				
463-	GRID	40		0.	1000.	600.				
464-	GRID	41		-600.	1000.	600.				
465-	GRID	42		-1200.	1000.	600.				
466-	GRID	43		600.	1200.	0.				
467-	GRID	44		-600.	1200.	0.				
468-	GRID	45		1200.	1200.	600.				
469-	GRID	46		600.	1200.	600.				
470-	GRID	47		0.	1200.	600.				
471-	GRID	48		-600.	1200.	600.				
472-	GRID	49		-1200.	1200.	600.				
473-	GRID	50		600.	1400.	0.				
474-	GRID	51		-600.	1400.	0.				
475-	GRID	52		1200.	1400.	600.				
476-	GRID	53		600.	1400.	600.				
477-	GRID	54		0.	1400.	600.				
478-	GRID	55		-600.	1400.	600.				
479-	GRID	56		-1200.	1400.	600.				
480-	GRID	57		600.	1600.	0.				
481-	GRID	58		-600.	1600.	0.				
482-	GRID	59		1200.	1600.	600.				
483-	GRID	60		600.	1600.	600.				
484-	GRID	61		0.	1600.	600.				
485-	GRID	62		-600.	1600.	600.				
486-	GRID	63		-1200.	1600.	600.				
487-	GRID	64		600.	1800.	0.				
488-	GRID	65		-600.	1800.	0.				
489-	GRID	66		1200.	1800.	600.				
490-	GRID	67		600.	1800.	600.				
491-	GRID	68		0.	1800.	600.				
492-	GRID	69		-600.	1800.	600.				
493-	GRID	70		-1200.	1800.	600.				
494-	GRID	71		600.	2000.	0.				
495-	GRID	72		-600.	2000.	0.				
496-	GRID	73		1200.	2000.	600.				
497-	GRID	74		600.	2000.	600.				
498-	GRID	75		0.	2000.	600.				
499-	GRID	76		-600.	2000.	600.				
500-	GRID	77		-1200.	2000.	600.				

S O R T E D B U L K D A T A E C H O

CARD COUNT	1	2	3	4	5	6	7	8	9	10
501	GRID	78	600.	2200.	0.					
502	GRID	79	-600.	2200.	0.					
503	GRID	80	1200.	2200.	600.					
504	GRID	81	600.	2200.	600.					
505	GRID	82	0.	2200.	600.					
506	GRID	83	-600.	2200.	600.					
507	GRID	84	-1200.	2200.	600.					
508	GRID	85	600.	2400.	0.					
509	GRID	86	-600.	2400.	0.					
510	GRID	87	1200.	2400.	600.					
511	GRID	88	600.	2400.	600.					
512	GRID	89	0.	2400.	600.					
513	GRID	90	-600.	2400.	600.					
514	GRID	91	-1200.	2400.	600.					
515	GRID	92	600.	2600.	0.					
516	GRID	93	-600.	2600.	0.					
517	GRID	94	1200.	2600.	600.					
518	GRID	95	600.	2600.	600.					
519	GRID	96	0.	2600.	600.					
520	GRID	97	-600.	2600.	600.					
521	GRID	98	-1200.	2600.	600.					
522	GRID	99	600.	2800.	0.					
523	GRID	100	-600.	2800.	0.					
524	GRID	101	1200.	2800.	600.					
525	GRID	102	600.	2800.	600.					
526	GRID	103	0.	2800.	600.					
527	GRID	104	-600.	2800.	600.					
528	GRID	105	-1200.	2800.	600.					
529	GRID	106	600.	3000.	0.					
530	GRID	107	-600.	3000.	0.					
531	GRID	108	1200.	3000.	600.					
532	GRID	109	600.	3000.	600.					
533	GRID	110	0.	3000.	600.					
534	GRID	111	-600.	3000.	600.					
535	GRID	112	-1200.	3000.	600.					
536	GRID	113	600.	3200.	0.					
537	GRID	114	-600.	3200.	0.					
538	GRID	115	1200.	3200.	600.					
539	GRID	116	600.	3200.	600.					
540	GRID	117	0.	3200.	600.					
541	GRID	118	-600.	3200.	600.					
542	GRID	119	-1200.	3200.	600.					
543	GRID	120	600.	3400.	0.					
544	GRID	121	-600.	3400.	0.					
545	GRID	122	1200.	3400.	600.					
546	GRID	123	600.	3400.	600.					
547	GRID	124	0.	3400.	600.					
548	GRID	125	-600.	3400.	600.					
549	GRID	126	-1200.	3400.	600.					
550	GRID	127	600.	3600.	0.					
551	GRID	128	-600.	3600.	0.					
552	GRID	129	1200.	3600.	600.					
553	GRID	130	600.	3600.	600.					
554	GRID	131	0.	3600.	600.					
555	GRID	132	-600.	3600.	600.					
556	GRID	133	-1200.	3600.	600.					
557	GRID	134	600.	3800.	0.					
558	GRID	135	-600.	3800.	0.					
559	GRID	136	1200.	3800.	600.					
560	GRID	137	600.	3800.	600.					
561	GRID	138	0.	3800.	600.					
562	GRID	139	-600.	3800.	600.					
563	GRID	140	-1200.	3800.	600.					
564	GRID	141	600.	4000.	0.					
565	GRID	142	-600.	4000.	0.					
566	GRID	143	1200.	4000.	600.					
567	GRID	144	600.	4000.	600.					
568	GRID	145	0.	4000.	600.					
569	GRID	146	-600.	4000.	600.					
570	GRID	147	-1200.	4000.	600.					
571	GRID	148	600.	4200.	0.					
572	GRID	149	-600.	4200.	0.					
573	GRID	150	1200.	4200.	600.					
574	GRID	151	600.	4200.	600.					
575	GRID	152	0.	4200.	600.					
576	GRID	153	-600.	4200.	600.					
577	GRID	154	-1200.	4200.	600.					
578	GRID	155	600.	4400.	0.					
579	GRID	156	-600.	4400.	0.					
580	GRID	157	1200.	4400.	600.					
581	GRID	158	600.	4400.	600.					
582	GRID	159	0.	4400.	600.					
583	GRID	160	-600.	4400.	600.					
584	GRID	161	-1200.	4400.	600.					
585	GRID	162	600.	4600.	0.					
586	GRID	163	-600.	4600.	0.					
587	GRID	164	1200.	4600.	600.					
588	GRID	165	600.	4600.	600.					
589	GRID	166	0.	4600.	600.					
590	GRID	167	-600.	4600.	600.					
591	GRID	168	-1200.	4600.	600.					
592	GRID	169	600.	4800.	0.					
593	GRID	170	-600.	4800.	0.					
594	GRID	171	1200.	4800.	600.					
595	GRID	172	600.	4800.	600.					
596	GRID	173	0.	4800.	600.					
597	GRID	174	-600.	4800.	600.					
598	GRID	175	-1200.	4800.	600.					
599	GRID	176	600.	5000.	0.					
600	GRID	177	-600.	5000.	0.					

134
134
12336
123344
123366
1236

S O R T E D B U L K D A T A E C H O

CARD COUNT	1	2	3	4	5	6	7	8	9	10
601-	GRID	178	1200.	5000.	600.					
602-	GRID	179	600.	5000.	600.					
603-	GRID	180	0.	5000.	600.					
604-	GRID	181	-600.	5000.	600.					
605-	GBID	182	-1200.	5000.	600.					
606-	GRID	183	600.	5200.	0.					
607-	GRID	184	-600.	5200.	0.					
608-	GRID	185	1200.	5200.	600.					
609-	GBID	186	600.	5200.	600.					
610-	GRID	187	0.	5200.	600.					
611-	GRID	188	-600.	5200.	600.					
612-	GRID	189	-1200.	5200.	600.					
613-	GRID	190	600.	5400.	0.					
614-	GBID	191	-600.	5400.	0.					
615-	GRID	192	1200.	5400.	600.					
616-	GRID	193	600.	5400.	600.					
617-	GRID	194	0.	5400.	600.					
618-	GRID	195	-600.	5400.	600.					
619-	GRID	196	-1200.	5400.	600.					
620-	GRID	197	600.	5600.	0.					
621-	GRID	198	-600.	5600.	0.					
622-	GRID	199	1200.	5600.	600.					
623-	GRID	200	600.	5600.	600.					
624-	GRID	201	0.	5600.	600.					
625-	GRID	202	-600.	5600.	600.					
626-	GRID	203	-1200.	5600.	600.					
627-	GBID	204	600.	5800.	0.					
628-	GRID	205	-600.	5800.	0.					
629-	GRID	206	1200.	5800.	600.					
630-	GRID	207	600.	5800.	600.					
631-	GRID	208	0.	5800.	600.					
632-	GRID	209	-600.	5800.	600.					
633-	GRID	210	-1200.	5800.	600.					
634-	GRID	211	600.	6000.	0.					
635-	GRID	212	-600.	6000.	0.					
636-	GBID	213	1200.	6000.	600.					
637-	GRID	214	600.	6000.	600.					
638-	GRID	215	0.	6000.	600.					
639-	GRID	216	-600.	6000.	600.					
640-	GRID	217	-1200.	6000.	600.					
641-	GRID	218	600.	6200.	0.					
642-	GRID	219	-600.	6200.	0.					
643-	GRID	220	1200.	6200.	600.					
644-	GRID	221	600.	6200.	600.					
645-	GRID	222	0.	6200.	600.					
646-	GAID	223	-600.	6200.	600.					
647-	GRID	224	-1200.	6200.	600.					
648-	GRID	225	600.	6400.	0.					
649-	GRID	226	-600.	6400.	0.					
650-	GRID	227	1200.	6400.	600.					
651-	GRID	228	600.	6400.	600.					
652-	GRID	229	0.	6400.	600.					
653-	GRID	230	-600.	6400.	600.					
654-	GHID	231	-1200.	6400.	600.					
655-	GRID	232	600.	6600.	0.					
656-	GRID	233	-600.	6600.	0.					
657-	GRID	234	1200.	6600.	600.					
658-	GRID	235	600.	6600.	600.					
659-	GRID	236	0.	6600.	600.					
660-	GRID	237	-600.	6600.	600.					
661-	GRID	238	-1200.	6600.	600.					
662-	GRID	239	600.	6800.	0.					
663-	GRID	240	-600.	6800.	0.					
664-	GRID	241	1200.	6800.	600.					
665-	GRID	242	600.	6800.	600.					
666-	GRID	243	0.	6800.	600.					
667-	GBID	244	-600.	6800.	600.					
668-	GRID	245	-1200.	6800.	600.					
669-	GRID	246	600.	7000.	0.					
670-	GRID	247	-600.	7000.	0.					
671-	GAID	248	1200.	7000.	600.					
672-	GRID	249	600.	7000.	600.					
673-	GRID	250	0.	7000.	600.					
674-	GRID	251	-600.	7000.	600.					
675-	GRID	252	-1200.	7000.	600.					
676-	GRID	253	600.	7200.	0.					
677-	GRID	254	-600.	7200.	0.					
678-	GRID	255	1200.	7200.	600.					
679-	GBID	256	600.	7200.	600.					
680-	GBID	257	0.	7200.	600.					
681-	GBID	258	-600.	7200.	600.					
682-	GRID	259	-1200.	7200.	600.					
683-	GRID	260	600.	7400.	0.					
684-	GRID	261	-600.	7400.	0.					
685-	GRID	262	1200.	7400.	600.					
686-	GBID	263	600.	7400.	600.					
687-	GRID	264	0.	7400.	600.					
688-	GRID	265	-600.	7400.	600.					
689-	GRID	266	-1200.	7400.	600.					
690-	GRID	267	600.	7600.	0.					
691-	GRID	268	-600.	7600.	0.					
692-	GRID	269	1200.	7600.	600.					
693-	GRID	270	600.	7600.	600.					
694-	GRID	271	0.	7600.	600.					
695-	GRID	272	-600.	7600.	600.					
696-	GRID	273	-1200.	7600.	600.					
697-	GRID	274	600.	7800.	0.					
698-	GRID	275	-600.	7800.	0.					
699-	GRID	276	1200.	7800.	600.					
700-	GRID	277	600.	7800.	600.					

S O R T E D B U L K D A T A E C A O

CARD COUNT	1	2	3	4	5	6	7	8	9	10
701-	GRID	278	0.	7800.	600.					
702-	GRID	279	-600.	7800.	600.					
703-	GRID	280	-1200.	7800.	600.					
704-	GRID	281	600.	8000.	0.					
705-	GRID	282	-600.	8000.	0.					
706-	GRID	283	1200.	8000.	600.					
707-	GRID	284	600.	8000.	600.					
708-	GRID	285	0.	8000.	600.					
709-	GRID	286	-600.	8000.	600.					
710-	GRID	287	-1200.	8000.	600.					
711-	GRID	288	600.	8200.	0.					
712-	GRID	289	-600.	8200.	0.					
713-	GRID	290	1200.	8200.	600.					
714-	GRID	291	600.	8200.	600.					
715-	GRID	292	0.	8200.	600.					
716-	GRID	293	-600.	8200.	600.					
717-	GRID	294	-1200.	8200.	600.					
718-	GRID	295	600.	8400.	0.					
719-	GRID	296	-600.	8400.	0.					
720-	GRID	297	1200.	8400.	600.					
721-	GRID	298	600.	8400.	600.					
722-	GRID	299	0.	8400.	600.					
723-	GRID	300	-600.	8400.	600.					
724-	GRID	301	-1200.	8400.	600.					
725-	GRID	302	600.	8600.	0.					
726-	GRID	303	-600.	8600.	0.					
727-	GRID	304	1200.	8600.	600.					
728-	GRID	305	600.	8600.	600.					
729-	GRID	306	0.	8600.	600.					
730-	GRID	307	-600.	8600.	600.					
731-	GRID	308	-1200.	8600.	600.					
732-	GRID	309	600.	8800.	0.					
733-	GRID	310	-600.	8800.	0.					
734-	GRID	311	1200.	8800.	600.					
735-	GRID	312	600.	8800.	600.					
736-	GRID	313	0.	8800.	600.					
737-	GRID	314	-600.	8800.	600.					
738-	GRID	315	-1200.	8800.	600.					
739-	GRID	316	600.	9000.	0.					
740-	GRID	317	-600.	9000.	0.					
741-	GRID	318	1200.	9000.	600.					
742-	GRID	319	600.	9000.	600.					
743-	GRID	320	0.	9000.	600.					
744-	GRID	321	-600.	9000.	600.					
745-	GRID	322	-1200.	9000.	600.					
746-	GRID	323	600.	9200.	0.					
747-	GRID	324	-600.	9200.	0.					
748-	GRID	325	1200.	9200.	600.					
749-	GRID	326	600.	9200.	600.					
750-	GRID	327	0.	9200.	600.					
751-	GRID	328	-600.	9200.	600.					
752-	GRID	329	-1200.	9200.	600.					
753-	GRID	330	600.	9400.	0.					
754-	GRID	331	-600.	9400.	0.					
755-	GRID	332	1200.	9400.	600.					
756-	GRID	333	600.	9400.	600.					
757-	GRID	334	0.	9400.	600.					
758-	GRID	335	-600.	9400.	600.					
759-	GRID	336	-1200.	9400.	600.					
760-	GRID	337	600.	9600.	0.					
761-	GRID	338	-600.	9600.	0.					
762-	GRID	339	1200.	9600.	600.					
763-	GRID	340	600.	9600.	600.					
764-	GRID	341	0.	9600.	600.					
765-	GRID	342	-600.	9600.	600.					
766-	GRID	343	-1200.	9600.	600.					
767-	GRID	344	600.	9800.	0.					
768-	GRID	345	-600.	9800.	0.					
769-	GRID	346	1200.	9800.	600.					
770-	GRID	347	600.	9800.	600.					
771-	GRID	348	0.	9800.	600.					
772-	GRID	349	-600.	9800.	600.					
773-	GRID	350	-1200.	9800.	600.					
774-	GRID	351	600.	10000.	0.					
775-	GRID	352	-600.	10000.	0.					
776-	GRID	353	1200.	10000.	600.					
777-	GRID	354	600.	10000.	600.					
778-	GRID	355	0.	10000.	600.					
779-	GRID	356	-600.	10000.	600.					
780-	GRID	357	-1200.	10000.	600.					
781-	GRID	358	600.	10200.	0.					
782-	GRID	359	-600.	10200.	0.					
783-	GRID	360	1200.	10200.	600.					
784-	GRID	361	600.	10200.	600.					
785-	GRID	362	0.	10200.	600.					
786-	GRID	363	-600.	10200.	600.					
787-	GRID	364	-1200.	10200.	600.					
788-	GRID	365	600.	10400.	0.					
789-	GRID	366	-600.	10400.	0.					
790-	GRID	367	1200.	10400.	600.					
791-	GRID	368	600.	10400.	600.					
792-	GRID	369	0.	10400.	600.					
793-	GRID	370	-600.	10400.	600.					
794-	GRID	371	-1200.	10400.	600.					
795-	GRID	372	600.	10600.	0.					
796-	GRID	373	-600.	10600.	0.					
797-	GRID	374	1200.	10600.	600.					
798-	GRID	375	600.	10600.	600.					
799-	GRID	376	0.	10600.	600.					
800-	GRID	377	-600.	10600.	600.					

134
134
1236
1236
1234
1236
1234
1236

CARD	1	2	3	4	5	6	7	8	9	10
COUNT										
801-	GRID	378		-1200.	10600.	600.				
802-	GRID	379		600.	10800.	0.				
803-	GRID	380		-600.	10800.	0.				
804-	GRID	381		1200.	10800.	600.				
805-	GRID	382		600.	10800.	600.				
806-	GRID	383		0.	10900.	600.				
807-	GRID	384		-600.	10800.	600.				
808-	GRID	385		-1200.	10800.	600.				
809-	GRID	386		600.	11000.	0.				
810-	GRID	387		-600.	11000.	0.				
811-	GRID	388		1200.	11000.	600.				
812-	GRID	389		600.	11000.	600.				
813-	GRID	390		0.	11000.	600.				
814-	GRID	391		-600.	11000.	600.				
815-	GRID	392		-1200.	11000.	600.				
816-	GRID	393		600.	11200.	0.				
817-	GRID	394		-600.	11200.	0.				
818-	GRID	395		1200.	11200.	600.				
819-	GRID	396		600.	11200.	600.				
820-	GRID	397		0.	11200.	600.				
821-	GRID	398		-600.	11200.	600.				
822-	GRID	399		-1200.	11200.	600.				
823-	GRID	400		600.	11400.	0.				
824-	GRID	401		-600.	11400.	0.				
825-	GRID	402		1200.	11400.	600.				
826-	GRID	403		600.	11400.	600.				
827-	GRID	404		0.	11400.	600.				
828-	GRID	405		-600.	11400.	600.				
829-	GRID	406		-1200.	11400.	600.				
830-	GRID	407		600.	11600.	0.				
831-	GRID	408		-600.	11600.	0.				
832-	GRID	409		1200.	11600.	600.				
833-	GRID	410		600.	11600.	600.				
834-	GRID	411		0.	11600.	600.				
835-	GRID	412		-600.	11600.	600.				
836-	GRID	413		-1200.	11600.	600.				
837-	GRID	414		600.	11800.	0.				
838-	GRID	415		-600.	11800.	0.				
839-	GRID	416		1200.	11800.	600.				
840-	GRID	417		600.	11800.	600.				
841-	GRID	418		0.	11800.	600.				
842-	GRID	419		-600.	11800.	600.				
843-	GRID	420		-1200.	11800.	600.				
844-	GRID	421		600.	12000.	0.			134	
845-	GRID	422		-600.	12000.	0.			134	
846-	GRID	423		1200.	12000.	600.			1236	
847-	GRID	424		600.	12000.	600.			1236	
848-	GRID	425		0.	12000.	600.			1236	
849-	GRID	426		-600.	12000.	600.			1236	
850-	GRID	427		-1200.	12000.	600.			1236	
851-	GRID	39		10.						
852-	PARAM	AUTOSPC	YES							
853-	PARAM	PSHELL	9	50.	39		39			
	ENDDATA									
TOTAL COUNT=		854								

Input Load Data for Double-Tee Beam Using Plate Element
Model Subjected to Unsymmetrical Load

791-	PLOAD2	100	1	-1.	93	94	99	100	105	106
792-	PLOAD2	100	1	-1.	111	112	117	118	123	124
793-	PLOAD2	100	1	-1.	129	130	135	136	141	142
794-	PLOAD2	100	1	-1.	147	148	153	154	159	160
795-	PLOAD2	100	1	-1.	165	166	171	172	177	178
796-	PLOAD2	100	1	-1.	183	184	189	190	195	196
797-	PLOAD2	100	1	-1.	201	202	207	208	213	214
798-	PLOAD2	100	1	-1.	219	220	225	226	231	232
799-	PLOAD2	100	1	-1.	237	238	243	244	249	250
800-	PLOAD2	100	1	-1.	255	256	261	262	267	268

Note: All other input data are the same as in symmetrical load case.

Input Data for Double-Tee Beam Using Solid Element Model Subjected to Symmetrical Load

MASTRAN EXECUTIVE CONTROL DECK ECHO

```

ID ART,WIN35
SOL 78
TIME 10
BEGINNING OF RP ALTER 24$74
GENERATE SEQGP BULK DATA CARDS FOR EFFICIENCY IN SYMMETRIC DECOMP.
THE FOLLOWING ARE USER INPUT PARAMETERS
VALUE OPTION
SEQOUT--OUTPUT OPTIONS FOR SEQGP CARDS
0 DEFAULT-NO PRINTED ON PUNCH OUTPUT
1 PRINT TABLE OF INTERNAL/EXTERNAL SEQUENCE I N INTERNAL ORDER
2 TRANSMIT THE SEQGP CARDS TO THE SYSTEM PUNCH FILE
3 PRINT TABLE AND PUNCH SEQGP CARDS
NEWSEQ--OPTIONS FOR SEQUEYCINC LOGIC
-1 DO NOT RESEQUENCE
1 USE ACTIVE COLUMN SEQUENCING OPTION
2 USE BAND SEQUENCING OPTION
3 UEFAULT-RUN BOTH ACTIVE COLUMN AND BAND SEQUENCING--SAVE THE SEQU ENCE
WITH THE LOWEST TIRE ESTIMATE FOR DECORPOSITION
SUPER--OPTIONS FOR TYPES OF SEQUENCING
0 DEFAULT-USE PASSIVE COLUCN SEQUENCING OPTION
-1 USE SUPERELEMENT SEQUENCINC OPTION
FACTOR--USED FOR THE GENERATION OF THE INTERNAL SEQUENCE NURBER
SEQID = FACTOR * SEID * SEQ NURBER
DEFAULT = 10000
MPCX--OPTION FOR MPC PROCESSING
-1 DO NOT PROCESS MPC BULK DATA CARDS OR RIGID ELERENTS
0 DEFAULT-PROCESS RIGID ELERENTS ONLY
N POSITIVE INTEGER IS THE NUMBER OF THE MPC SET TO PROCESS
ALONG WITH ANY RIGID ELERENTS PRESENT
START--STARTING POINT OPTIONS
U DEFAULT-PROGRAM SELECTS STARTING POINT
N INTEGER IS NUMBER OF POINTS TO BE USED TO START SEQUENCING
ALTER 8
CORD NOSEQP,NEWSEQ $
SEUP GEOM1,SEUP,SEH,GEOM10,HAIFANU/C,Y,SEQOUT=0/Y,Y,NEWSEQ=+3//
EQUIV GEOM1Q,GEOM1/ALWAYS $
LABEL NOSEQP
$ END OF RP ALTER 24$74
CEND

```

CASE CONTROL DECK ECHO

```

CARD
COUNT
1 TITLE=DOUBLE-TEE BEAM ( 3-D )
2 SUBTITLE=SUBJECTED TO UNSYMMETRIC UNIFORMLY DISTRIBUTED LOAD.
3 LOAD=100
4 STRESS=ALL
5 $DISPLACEMENT=ALL
6 SPCFORCE=ALL
7 $LFORCE=ALL
8 BEGIN BULK

```

INPUT BULK DATA CARD COUNT = 2445

SORTED BULK DATA ECHO										
CARD COUNT	1	2	3	4	5	6	7	8	9	10
101-	CHEXA	51	9	99	110	111	100	129	140	A51
102-	5	141	130							
103-	CHEXA	52	9	100	111	112	101	130	141	A52
104-	A52	142	131							
105-	CHEXA	53	9	104	113	114	105	134	143	A53
106-	A53	144	135							
107-	CHEXA	54	9	109	115	116	110	139	145	A54
108-	A54	146	140							
109-	CHEXA	55	9	113	117	118	114	143	147	A55
110-	A55	148	144							
111-	CHEXA	56	9	115	119	120	116	145	149	A56
112-	A56	150	146							
113-	CHEXA	57	9	121	132	133	122	151	162	A57
114-	A57	163	152							
115-	CHEXA	58	9	122	133	134	123	152	163	A58
116-	A58	164	153							
117-	CHEXA	59	9	123	134	135	124	153	164	A59
118-	A59	165	154							
119-	CHEXA	60	9	124	135	136	125	154	165	A60
120-	A60	166	155							
121-	CHEXA	61	9	125	136	137	126	155	166	A61
122-	6	167	156							
123-	CHEXA	62	9	126	137	138	127	156	167	A62
124-	A62	168	157							
125-	CHEXA	63	9	127	138	139	128	157	168	A63
126-	A63	169	158							
127-	CHEXA	64	9	128	139	140	129	158	169	A64
128-	A64	170	159							
129-	CHEXA	65	9	129	140	141	130	159	170	A65
130-	A65	171	160							
131-	CHEXA	66	9	130	141	142	131	160	171	A66
132-	6	172	161							
133-	CHEXA	67	9	134	143	144	135	164	173	A67
134-	6	174	165							
135-	CHEXA	68	9	139	145	146	140	169	175	A68
136-	A68	176	170							
137-	CHEXA	69	9	143	147	148	144	173	177	A69
138-	A69	178	174							
139-	CHEXA	70	9	145	149	150	146	175	179	A70
140-	A70	180	176							
141-	CHEXA	71	9	151	162	163	152	181	192	A71
142-	A71	183	182							
143-	CHEXA	72	9	152	163	164	153	182	193	A72
144-	A72	184	183							
145-	CHEXA	73	9	153	164	165	154	183	194	A73
146-	A73	195	184							
147-	CHEXA	74	9	154	165	166	155	184	195	A74
148-	A74	196	185							
149-	CHEXA	75	9	155	166	167	156	185	196	A75
150-	A75	197	186							
151-	CHEXA	76	9	156	167	168	157	196	197	A76
152-	A76	198	187							
153-	CHEXA	77	9	157	168	169	158	197	198	A77
154-	A77	199	188							
155-	CHEXA	78	9	158	169	170	159	188	199	A78
156-	A78	200	189							
157-	CHEXA	79	9	159	170	171	160	189	200	A79
158-	A79	201	190							
159-	CHEXA	80	9	160	171	172	161	190	201	A80
160-	A80	202	191							
161-	CHEXA	81	9	164	173	174	165	194	203	A81
162-	A81	204	195							
163-	CHEXA	82	9	159	175	176	170	199	205	A82
164-	A82	206	200							
165-	CHEXA	83	9	173	177	178	174	203	207	A83
166-	A83	208	204							
167-	CHEXA	84	9	175	179	180	176	205	209	A84
168-	A84	210	206							
169-	CHEXA	85	9	181	192	193	182	211	222	A85
170-	A85	223	212							
171-	CHEXA	86	9	182	193	194	183	212	223	A86
172-	A86	224	213							
173-	CHEXA	87	9	183	194	195	194	213	224	A87
174-	A87	225	214							
175-	CHEXA	88	9	184	195	196	185	214	225	A88
176-	A88	226	215							
177-	CHEXA	89	9	185	196	197	196	215	226	A89
178-	A89	227	216							
179-	CHEXA	90	9	186	197	198	187	216	227	A90
180-	A90	228	217							
181-	CHEXA	91	9	187	198	199	188	217	228	A91
182-	A91	229	218							
183-	CHEXA	92	9	188	199	200	189	218	229	A92
184-	A92	230	219							
185-	CHEXA	93	9	189	200	201	190	219	230	A93
186-	A93	231	220							
187-	CHEXA	94	9	190	201	202	191	220	231	A94
188-	A94	232	221							
189-	CHEXA	95	9	194	203	204	195	224	233	A95
190-	A95	234	225							
191-	CHEXA	96	9	199	205	206	200	229	235	A96
192-	A96	236	230							
193-	CHEXA	97	9	203	207	208	204	233	237	A97
194-	A97	238	234							
195-	CHEXA	98	9	205	209	210	206	235	239	A98
196-	A98	240	236							
197-	CHEXA	99	9	211	222	223	212	241	252	A99
198-	A99	253	242							
199-	CHEXA	100	9	212	223	224	213	242	253	A100
200-	A100	254	243							

CARD COUNT	1	2	3	4	5	6	7	8	9	10
201-	CHEXA	101	9	213	224	225	214	243	254	+B1
202-	+B1	255	9	244						
203-	CHEXA	102	9	214	225	226	215	244	255	+B2
204-	+B2	256	9	245						
205-	CHEXA	103	9	215	226	227	216	245	256	+B3
206-	+B3	257	9	246						
207-	CHEXA	104	9	216	227	228	217	246	257	+B4
208-	+B4	258	9	247						
209-	CHEXA	105	9	217	228	229	218	247	258	+B5
210-	+B5	259	9	248						
211-	CHEXA	106	9	218	229	230	219	248	259	+B6
212-	+B6	260	9	249						
213-	CHEXA	107	9	219	230	231	220	249	260	+B7
214-	+B7	261	9	250						
215-	CHEXA	108	9	220	231	232	221	250	261	+B8
216-	+B8	262	9	251						
217-	CHEXA	109	9	224	233	234	225	254	263	+B9
218-	+B9	264	9	255						
219-	CHEXA	110	9	229	235	236	230	259	265	+B10
220-	+B10	266	9	260						
221-	CHEXA	111	9	233	237	238	234	263	267	+B11
222-	+B11	268	9	264						
223-	CHEXA	112	9	235	239	240	236	265	269	+B12
224-	+B12	270	9	266						
225-	CHEXA	113	9	241	252	253	242	271	282	+B13
226-	+B13	283	9	272						
227-	CHEXA	114	9	242	253	254	243	272	283	+B14
228-	+B14	284	9	273						
229-	CHEXA	115	9	243	254	255	244	273	284	+B15
230-	+B15	285	9	274						
231-	CHEXA	116	9	244	255	256	245	274	285	+B16
232-	+B16	286	9	275						
233-	CHEXA	117	9	245	256	257	246	275	286	+B17
234-	+B17	287	9	276						
235-	CHEXA	118	9	246	257	258	247	276	287	+B18
236-	+B18	288	9	277						
237-	CHEXA	119	9	247	258	259	248	277	288	+B19
238-	+B19	289	9	278						
239-	CHEXA	120	9	248	259	260	249	278	289	+B20
240-	+B20	290	9	279						
241-	CHEXA	121	9	249	260	261	250	279	290	+B21
242-	+B21	291	9	280						
243-	CHEXA	122	9	250	261	262	251	280	291	+B22
244-	+B22	292	9	281						
245-	CHEXA	123	9	254	263	264	255	284	293	+B23
246-	+B23	293	9	285						
247-	CHEXA	124	9	259	265	266	260	289	295	+B24
248-	+B24	296	9	290						
249-	CHEXA	125	9	263	267	268	264	293	297	+B25
250-	+B25	298	9	294						
251-	CHEXA	126	9	265	269	270	266	295	299	+B26
252-	+B26	300	9	296						
253-	CHEXA	127	9	271	282	283	272	301	312	+B27
254-	+B27	313	9	302						
255-	CHEXA	128	9	272	283	284	273	302	313	+B28
256-	+B28	314	9	303						
257-	CHEXA	129	9	273	284	285	274	303	314	+B29
258-	+B29	315	9	304						
259-	CHEXA	130	9	274	285	286	275	304	315	+B30
260-	+B30	316	9	305						
261-	CHEXA	131	9	275	286	287	276	305	316	+B31
262-	+B31	317	9	306						
263-	CHEXA	132	9	276	287	288	277	306	317	+B32
264-	+B32	318	9	307						
265-	CHEXA	133	9	277	288	289	278	307	318	+B33
266-	+B33	319	9	308						
267-	CHEXA	134	9	278	289	290	279	308	319	+B34
268-	+B34	320	9	309						
269-	CHEXA	135	9	279	290	291	280	309	320	+B35
270-	+B35	321	9	310						
271-	CHEXA	136	9	280	291	292	281	310	321	+B36
272-	+B36	322	9	311						
273-	CHEXA	137	9	284	293	294	285	314	323	+B37
274-	+B37	324	9	315						
275-	CHEXA	138	9	289	295	296	290	319	325	+B38
276-	+B38	326	9	320						
277-	CHEXA	139	9	293	297	298	294	323	327	+B39
278-	+B39	328	9	324						
279-	CHEXA	140	9	295	299	300	296	325	329	+B40
280-	+B40	330	9	326						
281-	CHEXA	141	9	301	312	313	302	331	342	+B41
282-	+B41	343	9	332						
283-	CHEXA	142	9	302	313	314	303	332	343	+B42
284-	+B42	344	9	333						
285-	CHEXA	143	9	303	314	315	304	333	344	+B43
286-	+B43	345	9	334						
287-	CHEXA	144	9	304	315	316	305	334	345	+B44
288-	+B44	346	9	335						
289-	CHEXA	145	9	305	316	317	306	335	346	+B45
290-	+B45	347	9	336						
291-	CHEXA	146	9	306	336	337	307	317	347	+B46
292-	+B46	348	9	318						
293-	CHEXA	147	9	307	337	338	308	318	348	+B47
294-	+B47	349	9	319						
295-	CHEXA	148	9	308	338	339	309	319	349	+B48
296-	+B48	350	9	320						
297-	CHEXA	149	9	309	339	340	310	320	350	+B49
298-	+B49	351	9	321						
299-	CHEXA	150	9	310	340	341	311	321	351	+B50
300-	+B50	352	9	322						

CARD COUNT	1	2	3	4	5	6	7	8	9	10
301-	CHEXA	151	9	314	323	324	315	344	353	+B51
302-	+B51	354	345							
303-	CHEXA	152	9	319	325	326	320	349	355	+B52
304-	+B52	356	350							
305-	CHEXA	153	9	323	327	328	324	353	357	+B53
306-	+B53	358	354							
307-	CHEXA	154	9	325	329	330	326	355	359	+B54
308-	+B54	360	356							
309-	CHEXA	155	9	331	342	343	332	361	372	+B55
310-	+B55	373	362							
311-	CHEXA	156	9	332	343	344	333	362	373	+B56
312-	+B56	374	363							
313-	CHEXA	157	9	333	344	345	334	363	374	+B57
314-	+B57	375	364							
315-	CHEXA	158	9	334	345	346	335	364	375	+B58
316-	+B58	376	365							
317-	CHEXA	159	9	335	346	347	336	365	376	+B59
318-	+B59	377	366							
319-	CHEXA	160	9	336	366	367	337	347	377	+B60
320-	+B60	378	348							
321-	CHEXA	161	9	337	367	368	338	348	378	+B61
322-	+B61	379	349							
323-	CHEXA	162	9	338	368	369	339	349	379	+B62
324-	+B62	380	350							
325-	CHEXA	163	9	339	369	370	340	350	380	+B63
326-	+B63	381	351							
327-	CHEXA	164	9	340	370	371	341	351	381	+B64
328-	+B64	382	352							
329-	CHEXA	165	9	344	353	354	345	374	383	+B65
330-	+B65	384	375							
331-	CHEXA	166	9	349	355	356	350	379	385	+B66
332-	+B66	386	380							
333-	CHEXA	167	9	353	357	358	354	383	387	+B67
334-	+B67	388	384							
335-	CHEXA	168	9	355	359	360	356	385	389	+B68
336-	+B68	390	386							
337-	CHEXA	169	9	361	372	373	362	391	402	+B69
338-	+B69	403	392							
339-	CHEXA	170	9	362	373	374	363	392	403	+B70
340-	+B70	404	393							
341-	CHEXA	171	9	363	374	375	364	393	404	+B71
342-	+B71	405	394							
343-	CHEXA	172	9	364	375	376	365	394	405	+B72
344-	+B72	406	395							
345-	CHEXA	173	9	365	376	377	366	395	406	+B73
346-	+B73	407	396							
347-	CHEXA	174	9	366	396	397	367	377	407	+B74
348-	+B74	408	378							
349-	CHEXA	175	9	367	397	398	368	378	408	+B75
350-	+B75	409	379							
351-	CHEXA	176	9	368	398	399	369	379	409	+B76
352-	+B76	410	380							
353-	CHEXA	177	9	369	399	400	370	380	410	+B77
354-	+B77	411	381							
355-	CHEXA	178	9	370	400	401	371	381	411	+B78
356-	+B78	412	382							
357-	CHEXA	179	9	374	383	384	375	404	413	+B79
358-	+B79	414	405							
359-	CHEXA	180	9	379	385	386	380	409	415	+B80
360-	+B80	416	410							
361-	CHEXA	181	9	383	387	388	384	413	417	+B81
362-	+B81	418	414							
363-	CHEXA	182	9	385	389	390	386	415	419	+B82
364-	+B82	420	416							
365-	CHEXA	183	9	391	402	403	392	421	432	+B83
366-	+B83	433	422							
367-	CHEXA	184	9	392	403	404	393	422	433	+B84
368-	+B84	434	423							
369-	CHEXA	185	9	393	404	405	394	423	434	+B85
370-	+B85	435	424							
371-	CHEXA	186	9	394	405	406	395	424	435	+B86
372-	+B86	436	425							
373-	CHEXA	187	9	395	406	407	396	425	436	+B87
374-	+B87	437	426							
375-	CHEXA	188	9	396	426	427	397	407	437	+B88
376-	+B88	438	408							
377-	CHEXA	189	9	397	427	428	398	408	438	+B89
378-	+B89	439	409							
379-	CHEXA	190	9	398	428	429	399	409	439	+B90
380-	+B90	440	410							
381-	CHEXA	191	9	399	429	430	400	410	440	+B91
382-	+B91	441	411							
383-	CHEXA	192	9	400	430	431	401	411	441	+B92
384-	+B92	442	412							
385-	CHEXA	193	9	404	413	414	405	434	443	+B93
386-	+B93	444	435							
387-	CHEXA	194	9	409	415	416	410	439	445	+B94
388-	+B94	446	440							
389-	CHEXA	195	9	413	417	418	414	443	447	+B95
390-	+B95	448	444							
391-	CHEXA	196	9	415	419	420	416	445	449	+B96
392-	+B96	450	446							
393-	CHEXA	197	9	421	432	433	422	451	462	+B97
394-	+B97	463	452							
395-	CHEXA	198	9	422	433	434	423	452	463	+B98
396-	+B98	464	453							
397-	CHEXA	199	9	423	434	435	424	453	464	+B99
398-	+B99	465	454							
399-	CHEXA	200	9	424	435	436	425	454	465	+B100
400-	+B100	466	455							

CARD COUNT	1	2	3	4	5	6	7	8	9	10
401-	CHEXA	201	9	425	436	437	426	455	466	+C1
402-	+C1	467	9	456						
403-	CHEXA	202	9	426	437	438	427	456	467	+C2
404-	+C2	468	9	457						
405-	CHEXA	203	9	427	438	439	428	457	468	+C3
406-	+C3	469	9	458						
407-	CHEXA	204	9	428	439	440	429	458	469	+C4
408-	+C4	470	9	459						
409-	CHEXA	205	9	429	440	441	430	459	470	+C5
410-	+C5	471	9	460						
411-	CHEXA	206	9	430	441	442	431	460	471	+C6
412-	+C6	472	9	461						
413-	CHEXA	207	9	434	443	444	435	464	473	+C7
414-	+C7	474	9	465						
415-	CHEXA	208	9	439	445	446	440	469	475	+C8
416-	+C8	476	9	470						
417-	CHEXA	209	9	443	447	448	444	473	477	+C9
418-	+C9	478	9	474						
419-	CHEXA	210	9	445	449	450	446	475	479	+C10
420-	+C10	480	9	476						
421-	CHEXA	211	9	451	462	463	452	481	492	+C11
422-	+C11	493	9	482						
423-	CHEXA	212	9	452	463	464	453	482	493	+C12
424-	+C12	494	9	483						
425-	CHEXA	213	9	453	464	465	454	483	494	+C13
426-	+C13	495	9	484						
427-	CHEXA	214	9	454	465	466	455	484	495	+C14
428-	+C14	496	9	485						
429-	CHEXA	215	9	455	466	467	456	485	496	+C15
430-	+C15	497	9	486						
431-	CHEXA	216	9	456	467	468	457	486	497	+C16
432-	+C16	498	9	487						
433-	CHEXA	217	9	457	468	469	458	487	498	+C17
434-	+C17	499	9	488						
435-	CHEXA	218	9	458	469	470	459	488	499	+C18
436-	+C18	500	9	489						
437-	CHEXA	219	9	459	470	471	460	489	500	+C19
438-	+C19	501	9	490						
439-	CHEXA	220	9	460	471	472	461	490	501	+C20
440-	+C20	502	9	491						
441-	CHEXA	221	9	464	473	474	465	494	503	+C21
442-	+C21	504	9	495						
443-	CHEXA	222	9	469	475	476	470	499	505	+C22
444-	+C22	506	9	500						
445-	CHEXA	223	9	473	477	478	474	503	507	+C23
446-	+C23	508	9	504						
447-	CHEXA	224	9	475	479	480	476	505	509	+C24
448-	+C24	510	9	506						
449-	CHEXA	225	9	481	492	493	482	511	522	+C25
450-	+C25	523	9	512						
451-	CHEXA	226	9	482	493	494	483	512	523	+C26
452-	+C26	524	9	513						
453-	CHEXA	227	9	483	494	495	484	513	524	+C27
454-	+C27	525	9	514						
455-	CHEXA	228	9	484	495	496	485	514	525	+C28
456-	+C28	526	9	515						
457-	CHEXA	229	9	485	496	497	486	515	526	+C29
458-	+C29	527	9	516						
459-	CHEXA	230	9	486	516	517	487	497	527	+C30
460-	+C30	528	9	498						
461-	CHEXA	231	9	487	517	518	488	498	528	+C31
462-	+C31	529	9	499						
463-	CHEXA	232	9	488	518	519	489	499	529	+C32
464-	+C32	530	9	500						
465-	CHEXA	233	9	489	519	520	490	500	530	+C33
466-	+C33	531	9	501						
467-	CHEXA	234	9	490	520	521	491	501	531	+C34
468-	+C34	532	9	502						
469-	CHEXA	235	9	494	503	504	495	524	533	+C35
470-	+C35	534	9	525						
471-	CHEXA	236	9	499	505	506	500	529	535	+C36
472-	+C36	536	9	530						
473-	CHEXA	237	9	503	507	508	504	533	537	+C37
474-	+C37	538	9	534						
475-	CHEXA	238	9	505	509	510	506	535	539	+C38
476-	+C38	540	9	536						
477-	CHEXA	239	9	511	522	523	512	541	552	+C39
478-	+C39	541	9	542						
479-	CHEXA	240	9	512	523	524	513	542	553	+C40
480-	+C40	542	9	543						
481-	CHEXA	241	9	513	524	525	514	543	554	+C41
482-	+C41	543	9	544						
483-	CHEXA	242	9	514	525	526	515	544	555	+C42
484-	+C42	544	9	545						
485-	CHEXA	243	9	515	526	527	516	545	556	+C43
486-	+C43	545	9	546						
487-	CHEXA	244	9	516	546	547	517	527	557	+C44
488-	+C44	546	9	528						
489-	CHEXA	245	9	517	547	548	518	528	558	+C45
490-	+C45	547	9	529						
491-	CHEXA	246	9	518	548	549	519	529	559	+C46
492-	+C46	548	9	530						
493-	CHEXA	247	9	519	549	550	520	530	560	+C47
494-	+C47	549	9	531						
495-	CHEXA	248	9	520	550	551	521	531	561	+C48
496-	+C48	549	9	532						
497-	CHEXA	249	9	524	533	534	525	554	563	+C49
498-	+C49	550	9	555						
499-	CHEXA	250	9	529	535	536	530	559	565	+C50
500-	+C50	566	9	560						

CARD COUNT	1	2	3	4	5	6	7	8	9	10
501-	CHEXA	251	564	533	537	538	534	563	567	+C51
502-	+C51	568								
503-	CHEXA	252		535	539	540	536	565	569	+C52
504-	+C52	570	566							
505-	CHEXA	253		541	552	553	542	571	582	+C53
506-	+C53	583	572							
507-	CHEXA	254		542	553	554	543	572	583	+C54
508-	+C54	584	573							
509-	CHEXA	255		543	554	555	544	573	584	+C55
510-	+C55	585	574							
511-	CHEXA	256		544	555	556	545	574	585	+C56
512-	+C56	586	575							
513-	CHEXA	257		545	556	557	546	575	586	+C57
514-	+C57	587	576							
515-	CHEXA	258		546	576	577	547	557	587	+C58
516-	+C58	588	558							
517-	CHEXA	259		547	577	578	548	558	588	+C59
518-	+C59	589	559							
519-	CHEXA	260		548	578	579	549	559	589	+C60
520-	+C60	590	560							
521-	CHEXA	261		549	579	580	550	560	590	+C61
522-	+C61	591	561							
523-	CHEXA	262		550	580	581	551	561	591	+C62
524-	+C62	592	562							
525-	CHEXA	263		554	563	564	555	584	593	+C63
526-	+C63	594	585							
527-	CHEXA	264		559	565	566	560	589	595	+C64
528-	+C64	596	590							
529-	CHEXA	265		563	567	568	564	593	597	+C65
530-	+C65	598	594							
531-	CHEXA	266		565	569	570	566	595	599	+C66
532-	+C66	600	596							
533-	CHEXA	267		571	582	583	572	601	612	+C67
534-	+C67	613	602							
535-	CHEXA	268		572	583	584	573	602	613	+C68
536-	+C68	614	603							
537-	CHEXA	269		573	584	585	574	603	614	+C69
538-	+C69	615	604							
539-	CHEXA	270		574	585	586	575	604	615	+C70
540-	+C70	616	605							
541-	CHEXA	271		575	586	587	576	605	616	+C71
542-	+C71	617	606							
543-	CHEXA	272		576	606	607	577	587	617	+C72
544-	+C72	618	608							
545-	CHEXA	273		577	607	608	578	588	618	+C73
546-	+C73	619	609							
547-	CHEXA	274		578	608	609	579	589	619	+C74
548-	+C74	620	610							
549-	CHEXA	275		579	609	610	580	590	620	+C75
550-	+C75	621	611							
551-	CHEXA	276		580	610	611	581	591	621	+C76
552-	+C76	622	612							
553-	CHEXA	277		584	593	594	585	614	623	+C77
554-	+C77	624	615							
555-	CHEXA	278		589	595	596	590	619	625	+C78
556-	+C78	626	620							
557-	CHEXA	279		593	597	598	594	623	627	+C79
558-	+C79	628	624							
559-	CHEXA	280		595	599	600	596	625	629	+C80
560-	+C80	630	626							
561-	CHEXA	281		601	612	613	602	631	642	+C81
562-	+C81	643	632							
563-	CHEXA	282		602	613	614	603	632	643	+C82
564-	+C82	644	633							
565-	CHEXA	283		603	614	615	604	633	644	+C83
566-	+C83	645	634							
567-	CHEXA	284		604	615	616	605	634	645	+C84
568-	+C84	646	635							
569-	CHEXA	285		605	616	617	606	635	646	+C85
570-	+C85	647	636							
571-	CHEXA	286		606	617	618	607	636	647	+C86
572-	+C86	648	637							
573-	CHEXA	287		607	618	619	608	637	648	+C87
574-	+C87	649	638							
575-	CHEXA	288		608	619	620	609	638	649	+C88
576-	+C88	650	639							
577-	CHEXA	289		609	620	621	610	639	650	+C89
578-	+C89	651	640							
579-	CHEXA	290		610	621	622	611	640	651	+C90
580-	+C90	652	641							
581-	CHEXA	291		614	623	624	615	644	653	+C91
582-	+C91	654	645							
583-	CHEXA	292		619	625	626	620	649	655	+C92
584-	+C92	656	650							
585-	CHEXA	293		623	627	628	624	653	657	+C93
586-	+C93	658	654							
587-	CHEXA	294		625	629	630	626	655	659	+C94
588-	+C94	660	656							
589-	CHEXA	295		631	642	643	632	661	672	+C95
590-	+C95	673	662							
591-	CHEXA	296		632	643	644	633	662	673	+C96
592-	+C96	674	663							
593-	CHEXA	297		633	644	645	634	663	674	+C97
594-	+C97	675	664							
595-	CHEXA	298		634	645	646	635	664	675	+C98
596-	+C98	676	665							
597-	CHEXA	299		635	646	647	636	665	676	+C99
598-	+C99	677	666							
599-	CHEXA	300		636	647	648	637	666	677	+C100
600-	+C100	678	667							

CARD COUNT	1	2	3	4	5	6	7	8	9	10
601-	CHEXA	301	9	637	648	649	638	667	678	+D1
602-	+D1	679	9	668						
603-	CHEXA	302	9	638	649	650	639	668	679	+D2
604-	+D2	680	9	669						
605-	CHEIA	303	9	639	650	651	640	669	680	+D3
606-	+D3	681	9	670						
607-	CHEXA	304	9	640	651	652	641	670	681	+D4
608-	+D4	682	9	671						
609-	CHEIA	305	9	644	653	654	645	674	683	+D5
610-	+D5	684	9	675						
611-	CHEIA	306	9	649	655	656	650	679	685	+D6
612-	+D6	686	9	680						
613-	CHEXA	307	9	653	657	658	654	683	687	+D7
614-	+D7	688	9	684						
615-	CHEXA	308	9	655	659	660	656	685	689	+D8
616-	+D8	690	9	686						
617-	CHEIA	309	9	661	672	673	662	691	702	+D9
618-	+D9	703	9	692						
619-	CHEXA	310	9	662	673	674	663	692	703	+D10
620-	+D10	704	9	693						
621-	CHEXA	311	9	663	674	675	664	693	704	+D11
622-	+D11	705	9	694						
623-	CHEXA	312	9	664	675	676	665	694	705	+D12
624-	+D12	706	9	695						
625-	CHEXA	313	9	665	676	677	666	695	706	+D13
626-	+D13	707	9	696						
627-	CHEXA	314	9	666	677	678	667	696	707	+D14
628-	+D14	708	9	697						
629-	CHEIA	315	9	667	678	679	668	697	708	+D15
630-	+D15	709	9	698						
631-	CHEXA	316	9	668	679	680	669	698	709	+D16
632-	+D16	710	9	699						
633-	CHEXA	317	9	669	680	681	670	699	710	+D17
634-	+D17	711	9	700						
635-	CHEXA	318	9	670	681	682	671	700	711	+D18
636-	+D18	712	9	701						
637-	CHEXA	319	9	674	683	684	675	704	713	+D19
638-	+D19	714	9	705						
639-	CHEXA	320	9	679	685	686	680	709	715	+D20
640-	+D20	716	9	710						
641-	CHEXA	321	9	683	687	688	684	713	717	+D21
642-	+D21	718	9	714						
643-	CHEXA	322	9	685	689	690	686	715	719	+D22
644-	+D22	720	9	716						
645-	CHEXA	323	9	691	702	703	692	721	732	+D23
646-	+D23	733	9	722						
647-	CHEXA	324	9	692	703	704	693	722	733	+D24
648-	+D24	734	9	723						
649-	CHEXA	325	9	693	704	705	694	723	734	+D25
650-	+D25	735	9	724						
651-	CHEXA	326	9	694	705	706	695	724	735	+D26
652-	+D26	736	9	725						
653-	CHEXA	327	9	695	706	707	696	725	736	+D27
654-	+D27	737	9	726						
655-	CHEXA	328	9	696	707	708	697	726	737	+D28
656-	+D28	738	9	727						
657-	CHEXA	329	9	697	708	709	698	727	738	+D29
658-	+D29	739	9	728						
659-	CHEXA	330	9	698	709	710	699	728	739	+D30
660-	+D30	740	9	729						
661-	CHEXA	331	9	699	710	711	700	729	740	+D31
662-	+D31	741	9	730						
663-	CHEXA	332	9	700	711	712	701	730	741	+D32
664-	+D32	742	9	731						
665-	CHEXA	333	9	704	713	714	705	734	743	+D33
666-	+D33	743	9	735						
667-	CHEXA	334	9	709	715	716	710	739	745	+D34
668-	+D34	744	9	740						
669-	CHEXA	335	9	713	717	718	714	743	747	+D35
670-	+D35	745	9	744						
671-	CHEXA	336	9	715	719	720	716	745	749	+D36
672-	+D36	746	9	746						
673-	CHEKA	337	9	721	732	733	722	751	762	+D37
674-	+D37	763	9	752						
675-	CHEXA	338	9	722	733	734	723	752	763	+D38
676-	+D38	764	9	753						
677-	CHEXA	339	9	723	734	735	724	753	764	+D39
678-	+D39	765	9	754						
679-	CHEXA	340	9	724	735	736	725	754	765	+D40
680-	+D40	766	9	755						
681-	CHEIA	341	9	725	736	737	726	755	766	+D41
682-	+D41	767	9	756						
683-	CHEXA	342	9	726	737	738	727	756	767	+D42
684-	+D42	768	9	757						
685-	CHEXA	343	9	727	738	739	728	757	768	+D43
686-	+D43	769	9	758						
687-	CHEXA	344	9	728	739	740	729	758	769	+D44
688-	+D44	770	9	759						
689-	CHEXA	345	9	729	740	741	730	759	770	+D45
690-	+D45	771	9	760						
691-	CHEXA	346	9	730	741	742	731	760	771	+D46
692-	+D46	772	9	761						
693-	CHEXA	347	9	734	743	744	735	764	773	+D47
694-	+D47	774	9	765						
695-	CHEXA	348	9	739	745	746	740	769	775	+D48
696-	+D48	776	9	770						
697-	CHEXA	349	9	743	747	748	744	773	777	+D49
698-	+D49	777	9	774						
699-	CHEXA	350	9	745	749	750	746	775	779	+D50
700-	+D50	780	9	776						

CARD COUNT	1	2	3	4	5	6	7	8	9	10
701-	CHEXA	351	9	751	762	763	752	781	792	+D51
702-	+D51	352	9	752	763	764	753	782	793	+D52
703-	CHEXA	353	9	753	764	765	754	783	794	+D53
704-	+D52	354	9	754	765	766	755	784	795	+D54
705-	CHEXA	355	9	755	766	767	756	785	796	+D55
706-	+D53	356	9	756	767	768	757	786	797	+D56
707-	CHEXA	357	9	757	768	769	758	787	798	+D57
708-	+D54	358	9	758	769	770	759	788	799	+D58
709-	CHEXA	359	9	759	770	771	760	789	800	+D59
710-	+D55	360	9	760	771	772	761	790	801	+D60
711-	CHEXA	361	9	761	772	773	762	791	802	+D61
712-	+D56	362	9	762	773	774	763	792	803	+D62
713-	CHEXA	363	9	763	774	775	764	793	804	+D63
714-	+D57	364	9	764	775	776	765	794	805	+D64
715-	CHEXA	365	9	765	776	777	766	795	806	+D65
716-	+D58	366	9	766	777	778	767	796	807	+D66
717-	CHEXA	367	9	767	778	779	768	797	808	+D67
718-	+D59	368	9	768	779	780	769	798	809	+D68
719-	CHEXA	369	9	769	780	781	770	799	810	+D69
720-	+D60	370	9	770	781	782	771	800	811	+D70
721-	CHEXA	371	9	771	782	783	772	801	812	+D71
722-	+D61	372	9	772	783	784	773	802	813	+D72
723-	CHEXA	373	9	773	784	785	774	803	814	+D73
724-	+D62	374	9	774	785	786	775	804	815	+D74
725-	CHEXA	375	9	775	786	787	776	805	816	+D75
726-	+D63	376	9	776	787	788	777	806	817	+D76
727-	CHEXA	377	9	777	788	789	778	807	818	+D77
728-	+D64	378	9	778	789	790	779	808	819	+D78
729-	CHEXA	379	9	779	790	791	780	809	820	+D79
730-	+D65	380	9	780	791	792	781	810	821	+D80
731-	CHEXA	381	9	781	792	793	782	811	822	+D81
732-	+D66	382	9	782	793	794	783	812	823	+D82
733-	CHEXA	383	9	783	794	795	784	813	824	+D83
734-	+D67	384	9	784	795	796	785	814	825	+D84
735-	CHEXA	385	9	785	796	797	786	815	826	+D85
736-	+D68	386	9	786	797	798	787	816	827	+D86
737-	CHEXA	387	9	787	798	799	788	817	828	+D87
738-	+D69	388	9	788	799	800	789	818	829	+D88
739-	CHEXA	389	9	789	800	801	790	819	830	+D89
740-	+D70	390	9	790	801	802	791	820	831	+D90
741-	CHEXA	391	9	791	802	803	792	821	832	+D91
742-	+D71	392	9	792	803	804	793	822	833	+D92
743-	CHEXA	393	9	793	804	805	794	823	834	+D93
744-	+D72	394	9	794	805	806	795	824	835	+D94
745-	CHEXA	395	9	795	806	807	796	825	836	+D95
746-	+D73	396	9	796	807	808	797	826	837	+D96
747-	CHEXA	397	9	797	808	809	798	827	838	+D97
748-	+D74	398	9	798	809	810	799	828	839	+D98
749-	CHEXA	399	9	799	810	811	800	829	840	+D99
750-	+D75	400	9	800	811	812	801	830	841	+D100
751-	CHEXA	376	9	799	805	806	800	829	835	+D76
752-	+D76	836	9	803	807	808	804	833	837	+D77
753-	CHEXA	377	9	803	807	808	804	833	837	+D77
754-	+D77	838	9	805	809	810	806	835	839	+D78
755-	CHEXA	378	9	805	809	810	806	835	839	+D78
756-	+D78	840	9	811	822	823	812	841	852	+D79
757-	CHEXA	379	9	811	822	823	812	841	852	+D79
758-	+D79	853	9	812	823	824	813	842	853	+D90
759-	CHEXA	380	9	812	823	824	813	842	853	+D90
760-	+D80	854	9	813	824	825	814	843	854	+D81
761-	CHEXA	381	9	813	824	825	814	843	854	+D81
762-	+D81	855	9	814	825	826	815	844	855	+D82
763-	CHEXA	382	9	814	825	826	815	844	855	+D82
764-	+D82	856	9	815	826	827	816	845	856	+D83
765-	CHEXA	383	9	815	826	827	816	845	856	+D83
766-	+D83	857	9	816	827	828	817	846	857	+D84
767-	CHEXA	384	9	816	827	828	817	846	857	+D84
768-	+D84	858	9	817	828	829	818	847	858	+D85
769-	CHEXA	385	9	817	828	829	818	847	858	+D85
770-	+D85	859	9	818	829	830	819	848	859	+D86
771-	CHEXA	386	9	818	829	830	819	848	859	+D86
772-	+D86	860	9	819	830	831	820	849	860	+D87
773-	CHEXA	387	9	819	830	831	820	849	860	+D87
774-	+D87	861	9	820	831	832	821	850	861	+D88
775-	CHEXA	388	9	820	831	832	821	850	861	+D88
776-	+D88	862	9	821	832	833	822	851	862	+D89
777-	CHEXA	389	9	821	832	833	822	851	862	+D89
778-	+D89	863	9	822	833	834	823	852	863	+D90
779-	CHEXA	390	9	822	833	834	823	852	863	+D90
780-	+D90	864	9	823	834	835	824	853	864	+D91
781-	CHEXA	391	9	823	834	835	824	853	864	+D91
782-	+D91	865	9	824	835	836	825	854	865	+D92
783-	CHEXA	392	9	824	835	836	825	854	865	+D92
784-	+D92	866	9	825	836	837	826	855	866	+D93
785-	CHEXA	393	9	825	836	837	826	855	866	+D93
786-	+D93	867	9	826	837	838	827	856	867	+D94
787-	CHEXA	394	9	826	837	838	827	856	867	+D94
788-	+D94	868	9	827	838	839	828	857	868	+D95
789-	CHEXA	395	9	827	838	839	828	857	868	+D95
790-	+D95	869	9	828	839	840	829	858	869	+D96
791-	CHEXA	396	9	828	839	840	829	858	869	+D96
792-	+D96	870	9	829	840	841	830	859	870	+D97
793-	CHEXA	397	9	829	840	841	830	859	870	+D97
794-	+D97	871	9	830	841	842	831	860	871	+D98
795-	CHEXA	398	9	830	841	842	831	860	871	+D98
796-	+D98	872	9	831	842	843	832	861	872	+D99
797-	CHEXA	399	9	831	842	843	832	861	872	+D99
798-	+D99	873	9	832	843	844	833	862	873	+D100
799-	CHEXA	400	9	832	843	844	833	862	873	+D100
800-	+D100	874	9	833	844	845	834	863	874	+D100

SORTED BULK DATA ECHO										
CARD COUNT	1	2	3	4	5	6	7	8	9	10
801-	CHEXA	401	9	849	860	861	850	879	890	+E1
802-	+E1	891	9	880						
803-	CHEXA	402	9	850	861	862	851	880	891	+E2
804-	+E2	892	9	881						
805-	CHEXA	403	9	854	863	864	855	884	893	+E3
806-	+E3	894	9	885						
807-	CHEXA	404	9	859	865	866	860	889	895	+E4
808-	+E4	896	9	890						
809-	CHEXA	405	9	863	867	868	864	893	897	+E5
810-	+E5	898	9	894						
811-	CHEIA	406	9	865	869	870	866	895	899	+E6
812-	+E6	900	9	896						
813-	CHEXA	407	9	871	882	883	872	901	912	+E7
814-	+E7	913	9	902						
815-	CHEXA	408	9	872	883	884	873	902	913	+E8
816-	+E8	914	9	903						
817-	CHEXA	409	9	873	884	885	874	903	914	+E9
818-	+E9	915	9	904						
819-	CHEXA	410	9	874	885	886	875	904	915	+E10
820-	+E10	916	9	905						
821-	CHEIA	411	9	875	886	887	876	905	916	+E11
822-	+E11	917	9	906						
823-	CHEXA	412	9	876	887	888	877	906	917	+E12
824-	+E12	918	9	907						
825-	CHEXA	413	9	877	888	889	878	907	918	+E13
826-	+E13	919	9	908						
827-	CHEXA	414	9	878	889	890	879	908	919	+E14
828-	+E14	920	9	909						
829-	CHEIA	415	9	879	890	891	880	909	920	+E15
830-	+E15	921	9	910						
831-	CHEXA	416	9	880	891	892	881	910	921	+E16
832-	+E16	922	9	911						
833-	CHEXA	417	9	884	893	894	885	914	923	+E17
834-	+E17	924	9	915						
835-	CHEXA	418	9	889	895	896	890	919	925	+E18
836-	+E18	926	9	920						
837-	CHEXA	419	9	893	897	898	894	923	927	+E19
838-	+E19	928	9	924						
839-	CHEXA	420	9	895	899	900	896	925	929	+E20
840-	+E20	930	9	926						
841-	CHEXA	421	9	901	912	913	902	931	942	+E21
842-	+E21	943	9	932						
843-	CHEXA	422	9	902	913	914	903	932	943	+E22
844-	+E22	944	9	933						
845-	CHEXA	423	9	903	914	915	904	933	944	+E23
846-	+E23	945	9	934						
847-	CHEXA	424	9	904	915	916	905	934	945	+E24
848-	+E24	946	9	935						
849-	CHEXA	425	9	905	916	917	906	935	946	+E25
850-	+E25	947	9	936						
851-	CHEXA	426	9	906	917	918	907	936	947	+E26
852-	+E26	948	9	937						
853-	CHEXA	427	9	907	918	919	908	937	948	+E27
854-	+E27	949	9	938						
855-	CHEXA	428	9	908	919	920	909	938	949	+E28
856-	+E28	950	9	939						
857-	CHEXA	429	9	909	920	921	910	939	950	+E29
858-	+E29	951	9	940						
859-	CHEXA	430	9	910	921	922	911	940	951	+E30
860-	+E30	952	9	941						
861-	CHEXA	431	9	914	923	924	915	944	953	+E31
862-	+E31	954	9	945						
863-	CHEXA	432	9	919	925	926	920	949	955	+E32
864-	+E32	956	9	950						
865-	CHEIA	433	9	923	927	928	924	953	957	+E33
866-	+E33	958	9	954						
867-	CHEWA	434	9	925	929	930	926	955	959	+E34
868-	+E34	960	9	956						
869-	CHEXA	435	9	931	942	943	932	961	972	+E35
870-	+E35	973	9	962						
871-	CHEIA	436	9	932	943	944	933	962	973	+E36
872-	+E36	974	9	963						
873-	CHEXA	437	9	933	944	945	934	963	974	+E37
874-	+E37	975	9	964						
875-	CHEXA	438	9	934	945	946	935	964	975	+E38
876-	+E38	976	9	965						
877-	CHEXA	439	9	935	946	947	936	965	976	+E39
878-	+E39	977	9	966						
879-	CHEXA	440	9	936	947	948	937	966	977	+E40
880-	+E40	978	9	967						
881-	CHEXA	441	9	937	948	949	938	967	978	+E41
882-	+E41	979	9	968						
883-	CHEXA	442	9	938	949	950	939	968	979	+E42
884-	+E42	980	9	969						
885-	CHEIA	443	9	939	950	951	940	969	980	+E43
886-	+E43	981	9	970						
887-	CHEXA	444	9	940	951	952	941	970	981	+E44
888-	+E44	982	9	971						
889-	CHEXA	445	9	944	953	954	945	974	983	+E45
890-	+E45	984	9	975						
891-	CHEXA	446	9	949	955	956	950	979	985	+E46
892-	+E46	986	9	980						
893-	CHEXA	447	9	953	957	958	954	983	987	+E47
894-	+E47	988	9	984						
895-	CHEXA	448	9	955	959	960	956	985	989	+E48
896-	+E48	990	9	986						
897-	CHEXA	449	9	961	972	973	962	991	1002	+E49
898-	+E49	1003	9	992						
899-	CHEXA	450	9	962	973	974	963	992	1003	+E50
900-	+E50	1004	9	993						

CARD COUNT	1	2	3	4	5	6	7	8	9	10
901-	CHEXA	451	9	963	974	975	964	993	1004	+E51
902-	+E51	1005	994							
903-	CHEXA	452	9	964	975	976	965	994	1005	+E52
904-	+E52	1006	995							
905-	CHEXA	453	9	965	976	977	966	995	1006	+E53
906-	+E53	1007	996							
907-	CHEXA	454	9	966	977	978	967	996	1007	+E54
908-	+E54	1008	997							
909-	CHEXA	455	9	967	978	979	968	997	1008	+E55
910-	+E55	1009	998							
911-	CHEXA	456	9	968	979	980	969	998	1009	+E56
912-	+E56	1010	999							
913-	CHEXA	457	9	969	980	981	970	999	1010	+E57
914-	+E57	1011	1000							
915-	CHEXA	458	9	970	981	982	971	1000	1011	+E58
916-	+E58	1012	1001							
917-	CHEXA	459	9	974	983	984	975	1004	1013	+E59
918-	+E59	1014	1005							
919-	CHEXA	460	9	979	985	986	980	1009	1015	+E60
920-	+E60	1016	1010							
921-	CHEXA	461	9	983	987	988	984	1013	1017	+E61
922-	+E61	1018	1014							
923-	CHEXA	462	9	985	989	990	986	1015	1019	+E62
924-	+E62	1020	1016							
925-	CHEXA	463	9	991	1002	1003	992	1021	1032	+E63
926-	+E63	1033	1022							
927-	CHEXA	464	9	992	1003	1004	993	1022	1033	+E64
928-	+E64	1034	1023							
929-	CHEXA	465	9	993	1004	1005	994	1023	1034	+E65
930-	+E65	1035	1024							
931-	CHEXA	466	9	994	1005	1006	995	1024	1035	+E66
932-	+E66	1036	1025							
933-	CHEXA	467	9	995	1006	1007	996	1025	1036	+E67
934-	+E67	1037	1026							
935-	CHEXA	468	9	996	1007	1008	997	1026	1037	+E68
936-	+E68	1038	1027							
937-	CHEXA	469	9	997	1008	1009	998	1027	1038	+E69
938-	+E69	1039	1028							
939-	CHEXA	470	9	998	1009	1010	999	1028	1039	+E70
940-	+E70	1040	1029							
941-	CHEXA	471	9	999	1010	1011	1000	1029	1040	+E71
942-	+E71	1041	1030							
943-	CHEXA	472	9	1000	1011	1012	1001	1030	1041	+E72
944-	+E72	1042	1031							
945-	CHEXA	473	9	1004	1013	1014	1005	1034	1043	+E73
946-	+E73	1044	1035							
947-	CHEXA	474	9	1009	1015	1016	1010	1039	1045	+E74
948-	+E74	1046	1040							
949-	CHEXA	475	9	1013	1017	1018	1014	1043	1047	+E75
950-	+E75	1048	1044							
951-	CHEXA	476	9	1015	1019	1020	1016	1045	1049	+E76
952-	+E76	1050	1046							
953-	CHEXA	477	9	1021	1032	1033	1022	1051	1062	+E77
954-	+E77	1063	1052							
955-	CHEXA	478	9	1022	1033	1034	1023	1052	1063	+E78
956-	+E78	1064	1053							
957-	CHEXA	479	9	1023	1034	1035	1024	1053	1064	+E79
958-	+E79	1065	1054							
959-	CHEXA	480	9	1024	1035	1036	1025	1054	1065	+E80
960-	+E80	1066	1055							
961-	CHEXA	481	9	1025	1036	1037	1026	1055	1066	+E81
962-	+E81	1067	1056							
963-	CHEXA	482	9	1026	1037	1038	1027	1056	1067	+E82
964-	+E82	1068	1057							
965-	CHEXA	483	9	1027	1038	1039	1028	1057	1068	+E83
966-	+E83	1069	1058							
967-	CHEXA	484	9	1028	1039	1040	1029	1058	1069	+E84
968-	+E84	1070	1059							
969-	CHEXA	485	9	1029	1040	1041	1030	1059	1070	+E85
970-	+E85	1071	1060							
971-	CHEXA	486	9	1030	1041	1042	1031	1060	1071	+E86
972-	+E86	1072	1061							
973-	CHEXA	487	9	1034	1043	1044	1035	1064	1073	+E87
974-	+E87	1074	1065							
975-	CHEXA	488	9	1039	1045	1046	1040	1069	1075	+E88
976-	+E88	1076	1070							
977-	CHEXA	489	9	1043	1047	1048	1044	1073	1077	+E89
978-	+E89	1078	1074							
979-	CHEXA	490	9	1045	1049	1050	1046	1075	1079	+E90
980-	+E90	1080	1076							
981-	CHEXA	491	9	1051	1062	1063	1052	1081	1092	+E91
982-	+E91	1093	1082							
983-	CHEXA	492	9	1052	1063	1064	1053	1082	1093	+E92
984-	+E92	1094	1083							
985-	CHEXA	493	9	1053	1064	1065	1054	1083	1094	+E93
986-	+E93	1095	1084							
987-	CHEXA	494	9	1054	1065	1066	1055	1084	1095	+E94
988-	+E94	1096	1085							
989-	CHEXA	495	9	1055	1066	1067	1056	1085	1096	+E95
990-	+E95	1097	1086							
991-	CHEXA	496	9	1056	1067	1068	1057	1086	1097	+E96
992-	+E96	1098	1087							
993-	CHEXA	497	9	1057	1068	1069	1050	1087	1098	+E97
994-	+E97	1099	1088							
995-	CHEXA	498	9	1058	1069	1070	1059	1088	1099	+E98
996-	+E98	1100	1089							
997-	CHEXA	499	9	1059	1070	1071	1060	1089	1100	+E99
998-	+E99	1101	1090							
999-	CHEXA	500	9	1060	1071	1072	1061	1090	1101	+E99
1000-	+E99	1102	1091							

S O R T E D B U L K D A T A E C H O										
CARD COUNT	1	2	3	4	5	6	7	8	9	10
1001-	CHEXA	501	9	1064	1073	1074	1065	1094	1103	+F1
1002-	+F1	1104	1095							
1003-	CHEIA	502	9	1069	1075	1076	1070	1099	1105	+F2
1004-	+F2	1106	1100							
1005-	CHEIA	503	9	1073	1077	1078	1074	1103	1107	+F3
1006-	+F3	1108	1104							
1007-	CHEXA	504	9	1075	1079	1080	1076	1105	1109	+F4
1008-	+F4	1110	1106							
1009-	CHEXA	505	9	1081	1092	1093	1082	1111	1122	+F5
1010-	+F5	1123	1112							
1011-	CHEXA	506	9	1082	1093	1094	1083	1112	1123	+F6
1012-	+F6	1124	1113							
1013-	CHEXA	507	9	1083	1094	1095	1084	1113	1124	+F7
1014-	+F7	1125	1114							
1015-	CHEXA	508	9	1084	1095	1096	1085	1114	1125	+F8
1016-	+F8	1126	1115							
1017-	CHEIA	509	9	1085	1096	1097	1086	1115	1126	+F9
1018-	+F9	1127	1116							
1019-	CHEXA	510	9	1086	1097	1098	1087	1116	1127	+F10
1020-	+F10	1128	1117							
1021-	CHEXA	511	9	1087	1098	1099	1088	1117	1128	+F11
1022-	+F11	1129	1118							
1023-	CHEXA	512	9	1088	1099	1100	1089	1118	1129	+F12
1024-	+F12	1130	1119							
1025-	CHEXA	513	9	1089	1100	1101	1090	1119	1130	+F13
1026-	+F13	1131	1120							
1027-	CHEXA	514	9	1090	1101	1102	1091	1120	1131	+F14
1028-	+F14	1132	1121							
1029-	CHEXA	515	9	1094	1103	1104	1095	1124	1133	+F15
1030-	+F15	1134	1125							
1031-	CHEXA	516	9	1099	1105	1106	1100	1129	1135	+F16
1032-	+F16	1136	1130							
1033-	CHEXA	517	9	1103	1107	1108	1104	1133	1137	+F17
1034-	+F17	1138	1134							
1035-	CHEXA	518	9	1105	1109	1110	1106	1135	1139	+F18
1036-	+F18	1140	1136							
1037-	CHEXA	519	9	1111	1122	1123	1112	1141	1152	+F19
1038-	+F19	1153	1142							
1039-	CHEXA	520	9	1112	1123	1124	1113	1142	1153	+F20
1040-	+F20	1154	1143							
1041-	CHEXA	521	9	1113	1124	1125	1114	1143	1154	+F21
1042-	+F21	1155	1144							
1043-	CHEXA	522	9	1114	1125	1126	1115	1144	1155	+F22
1044-	+F22	1156	1145							
1045-	CHEXA	523	9	1115	1126	1127	1116	1145	1156	+F23
1046-	+F23	1157	1146							
1047-	CHEXA	524	9	1116	1127	1128	1117	1146	1157	+F24
1048-	+F24	1158	1147							
1049-	CHEXA	525	9	1117	1128	1129	1118	1147	1158	+F25
1050-	+F25	1159	1148							
1051-	CHEXA	526	9	1118	1129	1130	1119	1148	1159	+F26
1052-	+F26	1160	1149							
1053-	CHEXA	527	9	1119	1130	1131	1120	1149	1160	+F27
1054-	+F27	1161	1150							
1055-	CHEXA	528	9	1120	1131	1132	1121	1150	1161	+F28
1056-	+F28	1162	1151							
1057-	CHEXA	529	9	1124	1133	1134	1125	1154	1163	+F29
1058-	+F29	1164	1155							
1059-	CHEXA	530	9	1129	1135	1136	1130	1159	1165	+F30
1060-	+F30	1166	1160							
1061-	CHEXA	531	9	1133	1137	1138	1134	1163	1167	+F31
1062-	+F31	1168	1164							
1063-	CHEXA	532	9	1135	1139	1140	1136	1165	1169	+F32
1064-	+F32	1170	1166							
1065-	CHEXA	533	9	1141	1152	1153	1142	1171	1182	+F33
1066-	+F33	1183	1172							
1067-	CHEXA	534	9	1142	1153	1154	1143	1172	1183	+F34
1068-	+F34	1184	1173							
1069-	CHEXA	535	9	1143	1154	1155	1144	1173	1184	+F35
1070-	+F35	1185	1174							
1071-	CHEXA	536	9	1144	1155	1156	1145	1174	1185	+F36
1072-	+F36	1186	1175							
1073-	CHEXA	537	9	1145	1156	1157	1146	1175	1186	+F37
1074-	+F37	1187	1176							
1075-	CHEXA	538	9	1146	1157	1158	1147	1176	1187	+F38
1076-	+F38	1188	1177							
1077-	CHEXA	539	9	1147	1158	1159	1148	1177	1188	+F39
1078-	+F39	1189	1178							
1079-	CHEXA	540	9	1148	1159	1160	1149	1178	1189	+F40
1080-	+F40	1190	1179							
1081-	CHEXA	541	9	1149	1160	1161	1150	1179	1190	+F41
1082-	+F41	1191	1180							
1083-	CHEXA	542	9	1150	1161	1162	1151	1180	1191	+F42
1084-	+F42	1192	1181							
1085-	CHEXA	543	9	1154	1163	1164	1155	1184	1193	+F43
1086-	+F43	1194	1185							
1087-	CHEXA	544	9	1159	1165	1166	1160	1189	1195	+F44
1088-	+F44	1196	1190							
1089-	CHEXA	545	9	1163	1167	1168	1164	1193	1197	+F45
1090-	+F45	1198	1194							
1091-	CHEXA	546	9	1165	1169	1170	1166	1195	1199	+F46
1092-	+F46	1200	1196							
1093-	CHEXA	547	9	1171	1182	1183	1172	1201	1212	+F47
1094-	+F47	1213	1202							
1095-	CHEXA	548	9	1172	1183	1184	1173	1202	1213	+F48
1096-	+F48	1214	1203							
1097-	CHEXA	549	9	1173	1184	1185	1174	1203	1214	+F49
1098-	+F49	1215	1204							
1099-	CHEXA	550	9	1174	1185	1186	1175	1204	1215	+F50
1100-	+F50	1216	1205							

CARD	COU	Y	T	1	2	3	4	5	6	7	8	9	10
1101-	CHEXA	551	9	1175	1186	1187	1176	1188	1177	1206	1217	+F51	
1102-	+F51	1217	9	1206	1176	1187	1188	1189	1178	1207	1218	+F52	
1103-	CHEXA	552	9	1207	1177	1188	1178	1189	1179	1208	1219	+F53	
1104-	+F52	1218	9	1208	1178	1189	1189	1190	1179	1209	1220	+F54	
1105-	CHEXA	553	9	1209	1179	1190	1179	1191	1180	1210	1221	+F55	
1106-	+F53	1219	9	1210	1180	1191	1191	1192	1181	1211	1222	+F56	
1107-	CHEXA	554	9	1211	1181	1192	1192	1193	1182	1212	1223	+F57	
1108-	+F54	1220	9	1212	1182	1193	1193	1194	1183	1213	1224	+F58	
1109-	CHEXA	555	9	1213	1183	1194	1194	1195	1184	1214	1225	+F59	
1110-	+F55	1221	9	1214	1184	1195	1195	1196	1185	1215	1226	+F60	
1111-	CHEXA	556	9	1215	1185	1196	1196	1197	1186	1216	1227	+F60	
1112-	+F56	1222	9	1216	1186	1197	1197	1198	1187	1217	1228	+F60	
1113-	CHEXA	557	9	1217	1187	1198	1198	1199	1188	1218	1229	+F60	
1114-	+F57	1224	9	1218	1188	1199	1199	1200	1189	1219	1230	+F60	
1115-	CHEXA	558	9	1219	1189	1200	1200		1190				
1116-	+F58	1226	9	1220	1190								
1117-	CHEXA	559	9	1221	1191								
1118-	+F59	1228	9	1222	1192								
1119-	CHEXA	560	9	1223	1193								
1120-	+F60	1230	9	1224	1194								
1121-	GRDSET												
1122-	GRID	1		-1200.	0.	625.				456			
1123-	GPID	2		-900.	0.	625.				123456			
1124-	GRID	3		-625.	0.	625.				123456			
1125-	GRID	4		-375.	0.	625.				123456			
1126-	GRID	5		-275.	0.	625.				123456			
1127-	GRID	6		0.	0.	625.				123456			
1128-	GRID	7		275.	0.	625.				123456			
1129-	GRID	8		575.	0.	625.				123456			
1130-	GRID	9		625.	0.	625.				123456			
1131-	GRID	10		900.	0.	625.				123456			
1132-	GRID	11		1200.	0.	625.				123456			
1133-	GRID	12		-1200.	0.	575.				123456			
1134-	GRID	13		-900.	0.	575.				123456			
1135-	GRID	14		-625.	0.	575.				123456			
1136-	GRID	15		-575.	0.	575.				123456			
1137-	GRID	16		-275.	0.	575.				123456			
1138-	GRID	17		0.	0.	575.				123456			
1139-	GRID	18		275.	0.	575.				123456			
1140-	GRID	19		575.	0.	575.				123456			
1141-	GRID	20		625.	0.	575.				123456			
1142-	GRID	21		900.	0.	575.				123456			
1143-	GRID	22		1200.	0.	575.				123456			
1144-	GRID	23		-625.	0.	300.				123456			
1145-	GRID	24		-575.	0.	300.				123456			
1146-	GRID	25		575.	0.	300.				123456			
1147-	GRID	26		625.	0.	300.				123456			
1148-	GHID	27		-625.	0.	0.				123456			
1149-	GRID	28		-575.	0.	0.				123456			
1150-	GRID	29		575.	0.	0.				123456			
1151-	GRID	30		625.	0.	0.				123456			
1152-	GRID	31		-1200.	300.	625.							
1153-	GRID	32		-900.	300.	625.							
1154-	GRID	33		-625.	300.	625.							
1155-	GRID	34		-575.	300.	625.							
1156-	GRID	35		-275.	300.	625.							
1157-	GRID	36		0.	300.	625.							
1158-	GRID	37		275.	300.	625.							
1159-	GRID	38		575.	300.	625.							
1160-	GRID	39		625.	300.	625.							
1161-	GRID	40		900.	300.	625.							
1162-	GRID	41		1200.	300.	625.							
1163-	GRID	42		-1200.	300.	575.							
1164-	GRID	43		-900.	300.	575.							
1165-	GRID	44		-625.	300.	575.							
1166-	GRID	45		-575.	300.	575.							
1167-	GRID	46		-275.	300.	575.							
1168-	GRID	47		0.	300.	575.							
1169-	GRID	48		275.	300.	575.							
1170-	GRID	49		575.	300.	575.							
1171-	GRID	50		625.	300.	575.							
1172-	GRID	51		900.	300.	575.							
1173-	GRID	52		1200.	300.	575.							
1174-	GRID	53		-625.	300.	300.							
1175-	GRID	54		-575.	300.	300.							
1176-	GRID	55		575.	300.	300.							
1177-	GRID	56		625.	300.	300.							
1178-	GRID	57		-625.	300.	0.							
1179-	GRID	58		-575.	300.	0.							
1180-	GRID	59		575.	300.	0.							
1181-	GRID	60		625.	300.	0.							
1182-	GRID	61		-1200.	600.	625.							
1183-	GRID	62		-900.	600.	625.							
1184-	GHID	63		-625.	600.	625.							
1185-	GRID	64		-575.	600.	625.							
1186-	GRID	65		-275.	600.	625.							
1187-	GRID	66		0.	600.	625.							
1188-	GHID	67		275.	600.	625.							
1189-	GRID	68		575.	600.	625.							
1190-	GRID	69		625.	600.	625.							
1191-	GRID	70		900.	600.	625.							
1192-	GRID	71		1200.	600.	625.							
1193-	GRID	72		-1200.	600.	575.							
1194-	GRID	73		-900.	600.	575.							
1195-	GRID	74		-625.	600.	575.							
1196-	GRID	75		-575.	600.	575.							
1197-	GRID	76		-275.	600.	575.							
1198-	GRID	77		0.	600.	575.							
1199-	GRID	78		275.	600.	575.							
1200-	GRID	79		575.	600.	575.							

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1201-	GRID	80		625.	600.	575.				
1202-	GRID	81		900.	600.	575.				
1203-	GRID	82		1200.	600.	575.				
1204-	GRID	83		-625.	600.	300.				
1205-	GRID	84		-575.	600.	300.				
1206-	GRID	85		575.	600.	300.				
1207-	GRID	86		625.	600.	300.				
1208-	GRID	87		-625.	600.	0.				
1209-	GRID	88		-575.	600.	0.				
1210-	GRID	89		575.	600.	0.				
1211-	GRID	90		625.	600.	0.				
1212-	GRID	91		-1200.	900.	625.				
1213-	GRID	92		-900.	900.	625.				
1214-	GRID	93		-625.	900.	625.				
1215-	GRID	94		-575.	900.	625.				
1216-	GRID	95		-275.	900.	625.				
1217-	GRID	96		0.	900.	625.				
1218-	GRID	97		275.	900.	625.				
1219-	GRID	98		575.	900.	625.				
1220-	GRID	99		625.	900.	625.				
1221-	GRID	100		900.	900.	625.				
1222-	GRID	101		1200.	900.	625.				
1223-	GRID	102		-1200.	900.	575.				
1224-	GRID	103		-900.	900.	575.				
1225-	GRID	104		-625.	900.	575.				
1226-	GRID	105		-575.	900.	575.				
1227-	GRID	106		-275.	900.	575.				
1228-	GRID	107		0.	900.	575.				
1229-	GRID	108		275.	900.	575.				
1230-	GRID	109		575.	900.	575.				
1231-	GRID	110		625.	900.	575.				
1232-	GRID	111		900.	900.	575.				
1233-	GRID	112		1200.	900.	575.				
1234-	GRID	113		-625.	900.	300.				
1235-	GRID	114		-575.	900.	300.				
1236-	GRID	115		575.	900.	300.				
1237-	GRID	116		625.	900.	300.				
1238-	GRID	117		-625.	900.	0.				
1239-	GRID	118		-575.	900.	0.				
1240-	GRID	119		575.	900.	0.				
1241-	GRID	120		625.	900.	0.				
1242-	GRID	121		-1200.	1200.	625.				
1243-	GRID	122		-900.	1200.	625.				
1244-	GRID	123		-625.	1200.	625.				
1245-	GRID	124		-575.	1200.	625.				
1246-	GRID	125		-275.	1200.	625.				
1247-	GRID	126		0.	1200.	625.				
1248-	GRID	127		275.	1200.	625.				
1249-	GRID	128		575.	1200.	625.				
1250-	GRID	129		625.	1200.	625.				
1251-	GRID	130		900.	1200.	625.				
1252-	GRID	131		1200.	1200.	625.				
1253-	GRID	132		-1200.	1200.	575.				
1254-	GRID	133		-900.	1200.	575.				
1255-	GRID	134		-625.	1200.	575.				
1256-	GRID	135		-575.	1200.	575.				
1257-	GRID	136		-275.	1200.	575.				
1258-	GRID	137		0.	1200.	575.				
1259-	GRID	138		275.	1200.	575.				
1260-	GRID	139		575.	1200.	575.				
1261-	GRID	140		625.	1200.	575.				
1262-	GRID	141		900.	1200.	575.				
1263-	GRID	142		1200.	1200.	575.				
1264-	GRID	143		-625.	1200.	300.				
1265-	GRID	144		-575.	1200.	300.				
1266-	GRID	145		575.	1200.	300.				
1267-	GRID	146		625.	1200.	300.				
1268-	GRID	147		-625.	1200.	0.				
1269-	GRID	148		-575.	1200.	0.				
1270-	GRID	149		575.	1200.	0.				
1271-	GRID	150		625.	1200.	0.				
1272-	GRID	151		-1200.	1500.	625.				
1273-	GRID	152		-300.	1500.	625.				
1274-	GRID	153		-625.	1500.	625.				
1275-	GRID	154		-575.	1500.	625.				
1276-	GRID	155		-275.	1500.	625.				
1277-	GRID	156		0.	1500.	625.				
1278-	GRID	157		275.	1500.	625.				
1279-	GRID	158		575.	1500.	625.				
1280-	GRID	159		900.	1500.	625.				
1281-	GRID	160		1200.	1500.	625.				
1282-	GRID	161		-1200.	1500.	575.				
1283-	GRID	162		-900.	1500.	575.				
1284-	GRID	163		-625.	1500.	575.				
1285-	GRID	164		-575.	1500.	575.				
1286-	GRID	165		-275.	1500.	575.				
1287-	GRID	166		0.	1500.	575.				
1288-	GRID	167		275.	1500.	575.				
1289-	GRID	168		575.	1500.	575.				
1290-	GRID	169		625.	1500.	575.				
1291-	GRID	170		900.	1500.	575.				
1292-	GRID	171		1200.	1500.	575.				
1293-	GRID	172		-625.	1500.	300.				
1294-	GRID	173		-575.	1500.	300.				
1295-	GRID	174		575.	1500.	300.				
1296-	GRID	175		625.	1500.	300.				
1297-	GRID	176		-625.	1500.	0.				
1298-	GRID	177		-575.	1500.	0.				
1299-	GRID	178		575.	1500.	0.				
1300-	GRID	179		575.	1500.	0.				

S O R T E D B U L K D A T A E C H O

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1301-	GRID	180	625.	1500.	0.					
1302-	GRID	181	-1200.	1800.	625.					
1303-	GRID	182	-900.	1800.	625.					
1304-	GRID	183	-625.	1800.	625.					
1305-	GRID	184	-575.	1800.	625.					
1306-	GRID	185	-275.	1800.	625.					
1307-	GRID	186	0.	1800.	625.					
1308-	GRID	187	275.	1800.	625.					
1309-	GRID	188	575.	1800.	625.					
1310-	GRID	189	625.	1800.	625.					
1311-	GRID	190	900.	1800.	625.					
1312-	GRID	191	1200.	1800.	625.					
1313-	GRID	192	-1200.	1800.	575.					
1314-	GRID	193	-900.	1800.	575.					
1315-	GRID	194	-625.	1800.	575.					
1316-	GRID	195	-575.	1800.	575.					
1317-	GRID	196	-275.	1800.	575.					
1318-	GRID	197	0.	1800.	575.					
1319-	GRID	198	275.	1800.	575.					
1320-	GRID	199	575.	1800.	575.					
1321-	GRID	200	625.	1800.	575.					
1322-	GRID	201	900.	1800.	575.					
1323-	GRID	202	1200.	1800.	575.					
1324-	GRID	203	-625.	1800.	300.					
1325-	GRID	204	-575.	1800.	300.					
1326-	GRID	205	575.	1800.	300.					
1327-	GRID	206	625.	1800.	300.					
1328-	GRID	207	-625.	1800.	0.					
1329-	GRID	208	-575.	1800.	0.					
1330-	GRID	209	575.	1800.	0.					
1331-	GRID	210	625.	1800.	0.					
1332-	GRID	211	-1200.	2100.	625.					
1333-	GRID	212	-900.	2100.	625.					
1334-	GRID	213	-625.	2100.	625.					
1335-	GRID	214	-575.	2100.	625.					
1336-	GRID	215	-275.	2100.	625.					
1337-	GRID	216	0.	2100.	625.					
1338-	GRID	217	275.	2100.	625.					
1339-	GRID	218	575.	2100.	625.					
1340-	GRID	219	625.	2100.	625.					
1341-	GRID	220	900.	2100.	625.					
1342-	GRID	221	1200.	2100.	625.					
1343-	GRID	222	-1200.	2100.	575.					
1344-	GRID	223	-900.	2100.	575.					
1345-	GRID	224	-625.	2100.	575.					
1346-	GRID	225	-575.	2100.	575.					
1347-	GRID	226	-275.	2100.	575.					
1348-	GRID	227	0.	2100.	575.					
1349-	GRID	228	275.	2100.	575.					
1350-	GRID	229	575.	2100.	575.					
1351-	GRID	230	625.	2100.	575.					
1352-	GRID	231	900.	2100.	575.					
1353-	GRID	232	1200.	2100.	575.					
1354-	GRID	233	-625.	2100.	300.					
1355-	GRID	234	-575.	2100.	300.					
1356-	GRID	235	575.	2100.	300.					
1357-	GRID	236	625.	2100.	300.					
1358-	GRID	237	-625.	2100.	0.					
1359-	GRID	238	-575.	2100.	0.					
1360-	GRID	239	575.	2100.	0.					
1361-	GRID	240	625.	2100.	0.					
1362-	GRID	241	-1200.	2400.	625.					
1363-	GRID	242	-900.	2400.	625.					
1364-	GRID	243	-625.	2400.	625.					
1365-	GRID	244	-575.	2400.	625.					
1366-	GRID	245	-275.	2400.	625.					
1367-	GRID	246	0.	2400.	625.					
1368-	GRID	247	275.	2400.	625.					
1369-	GRID	248	575.	2400.	625.					
1370-	GRID	249	625.	2400.	625.					
1371-	GRID	250	900.	2400.	625.					
1372-	GRID	251	1200.	2400.	625.					
1373-	GRID	252	-1200.	2400.	575.					
1374-	GRID	253	-900.	2400.	575.					
1375-	GRID	254	-625.	2400.	575.					
1376-	GRID	255	-575.	2400.	575.					
1377-	GRID	256	-275.	2400.	575.					
1378-	GRID	257	0.	2400.	575.					
1379-	GRID	258	275.	2400.	575.					
1380-	GRID	259	575.	2400.	575.					
1381-	GRID	260	625.	2400.	575.					
1382-	GRID	261	900.	2400.	575.					
1383-	GRID	262	1200.	2400.	575.					
1384-	GRID	263	-625.	2400.	300.					
1385-	GRID	264	-575.	2400.	300.					
1386-	GRID	265	575.	2400.	300.					
1387-	GRID	266	625.	2400.	300.					
1388-	GRID	267	-625.	2400.	0.					
1389-	GRID	268	-575.	2400.	0.					
1390-	GRID	269	575.	2400.	0.					
1391-	GRID	270	625.	2400.	0.					
1392-	GRID	271	-1200.	2700.	625.					
1393-	GRID	272	-900.	2700.	625.					
1394-	GRID	273	-625.	2700.	625.					
1395-	GRID	274	-575.	2700.	625.					
1396-	GRID	275	-275.	2700.	625.					
1397-	GRID	276	0.	2700.	625.					
1398-	GRID	277	275.	2700.	625.					
1399-	GRID	278	575.	2700.	625.					
1400-	GRID	279	625.	2700.	625.					

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1401-	GRID	280		900.	2700.	625.				
1402-	GRID	281		1200.	2700.	625.				
1403-	GRID	282		-1200.	2700.	575.				
1404-	GRID	283		-900.	2700.	575.				
1405-	GRID	284		-625.	2700.	575.				
1406-	GRID	285		-575.	2700.	575.				
1407-	GRID	286		-275.	2700.	575.				
1408-	GRID	287		0.	2700.	575.				
1409-	GRID	288		275.	2700.	575.				
1410-	GRID	289		575.	2700.	575.				
1411-	GRID	290		625.	2700.	575.				
1412-	GRID	291		900.	2700.	575.				
1413-	GRID	292		1200.	2700.	575.				
1414-	GRID	293		-625.	2700.	300.				
1415-	GRID	294		-575.	2700.	300.				
1416-	GRID	295		575.	2700.	300.				
1417-	GRID	296		625.	2700.	300.				
1418-	GRID	297		-625.	2700.	0.				
1419-	GRID	298		-575.	2700.	0.				
1420-	GRID	299		575.	2700.	0.				
1421-	GRID	300		625.	2700.	0.				
1422-	GRID	301		-1200.	3000.	625.			13456	
1423-	GRID	302		-900.	3000.	625.			13456	
1424-	GRID	303		-625.	3000.	625.			13456	
1425-	GRID	304		-575.	3000.	625.			13456	
1426-	GRID	305		-275.	3000.	625.			13456	
1427-	GRID	306		0.	3000.	625.			13456	
1428-	GRID	307		275.	3000.	625.			13456	
1429-	GRID	308		575.	3000.	625.			13456	
1430-	GRID	309		625.	3000.	625.			13456	
1431-	GRID	310		900.	3000.	625.			13456	
1432-	GRID	311		1200.	3000.	625.			13456	
1433-	GRID	312		-1200.	3000.	575.			13456	
1434-	GRID	313		-900.	3000.	575.			13456	
1435-	GRID	314		-625.	3000.	575.			13456	
1436-	GRID	315		-575.	3000.	575.			13456	
1437-	GRID	316		-275.	3000.	575.			13456	
1438-	GRID	317		0.	3000.	575.			13456	
1439-	GRID	318		275.	3000.	575.			13456	
1440-	GRID	319		575.	3000.	575.			13456	
1441-	GRID	320		625.	3000.	575.			13456	
1442-	GRID	321		900.	3000.	575.			13456	
1443-	GRID	322		1200.	3000.	575.			13456	
1444-	GRID	323		-625.	3000.	300.			13456	
1445-	GRID	324		-575.	3000.	300.			13456	
1446-	GRID	325		575.	3000.	300.			13456	
1447-	GRID	326		625.	3000.	300.			13456	
1448-	GRID	327		-625.	3000.	0.			13456	
1449-	GRID	328		-575.	3000.	0.			13456	
1450-	GRID	329		575.	3000.	0.			13456	
1451-	GRID	330		625.	3000.	0.			13456	
1452-	GRID	331		-1200.	3300.	625.				
1453-	GRID	332		-900.	3300.	625.				
1454-	GRID	333		-625.	3300.	625.				
1455-	GRID	334		-575.	3300.	625.				
1456-	GRID	335		-275.	3300.	625.				
1457-	GRID	336		0.	3300.	625.				
1458-	GRID	337		275.	3300.	625.				
1459-	GRID	338		575.	3300.	625.				
1460-	GRID	339		625.	3300.	625.				
1461-	GRID	340		900.	3300.	625.				
1462-	GRID	341		1200.	3300.	625.				
1463-	GRID	342		-1200.	3300.	575.				
1464-	GRID	343		-900.	3300.	575.				
1465-	GRID	344		-625.	3300.	575.				
1466-	GRID	345		-575.	3300.	575.				
1467-	GRID	346		-275.	3300.	575.				
1468-	GRID	347		0.	3300.	575.				
1469-	GRID	348		275.	3300.	575.				
1470-	GRID	349		575.	3300.	575.				
1471-	GRID	350		625.	3300.	575.				
1472-	GRID	351		900.	3300.	575.				
1473-	GRID	352		1200.	3300.	575.				
1474-	GRID	353		-625.	3300.	300.				
1475-	GRID	354		-575.	3300.	300.				
1476-	GRID	355		575.	3300.	300.				
1477-	GRID	356		625.	3300.	300.				
1478-	GRID	357		-625.	3300.	0.				
1479-	GRID	358		-575.	3300.	0.				
1480-	GRID	359		575.	3300.	0.				
1481-	GRID	360		625.	3300.	0.				
1482-	GRID	361		-1200.	3600.	625.				
1483-	GRID	362		-900.	3600.	625.				
1484-	GRID	363		-625.	3600.	625.				
1485-	GRID	364		-575.	3600.	625.				
1486-	GRID	365		-275.	3600.	625.				
1487-	GRID	366		0.	3600.	625.				
1488-	GRID	367		275.	3600.	625.				
1489-	GRID	368		575.	3600.	625.				
1490-	GRID	369		625.	3600.	625.				
1491-	GRID	370		900.	3600.	625.				
1492-	GRID	371		1200.	3600.	625.				
1493-	GRID	372		-1200.	3600.	575.				
1494-	GRID	373		-900.	3600.	575.				
1495-	GRID	374		-625.	3600.	575.				
1496-	GRID	375		-575.	3600.	575.				
1497-	GRID	376		-275.	3600.	575.				
1498-	GRID	377		0.	3600.	575.				
1499-	GRID	378		275.	3600.	575.				
1500-	GRID	379		575.	3600.	575.				

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1501-	GRID	380	625.	3600.	575.					
1502-	GRID	381	900.	3600.	575.					
1503-	GRID	382	1200.	3600.	575.					
1504-	GRID	383	-625.	3600.	300.					
1505-	GRID	384	-575.	3600.	300.					
1506-	GRID	385	575.	3600.	300.					
1507-	GRID	386	625.	3600.	300.					
1508-	GRID	387	-625.	3600.	0.					
1509-	GRID	388	-575.	3600.	0.					
1510-	GRID	389	575.	3600.	0.					
1511-	GRID	390	625.	3600.	0.					
1512-	GRID	391	-1200.	3900.	625.					
1513-	GRID	392	-900.	3900.	625.					
1514-	GRID	393	-625.	3900.	625.					
1515-	GRID	394	-575.	3900.	625.					
1516-	GRID	395	-275.	3900.	625.					
1517-	GRID	396	0.	3900.	625.					
1518-	GRID	397	275.	3900.	625.					
1519-	GRID	398	575.	3900.	625.					
1520-	GRID	399	625.	3900.	625.					
1521-	GRID	400	900.	3900.	625.					
1522-	GRID	401	1200.	3900.	625.					
1523-	GRID	402	-1200.	3900.	575.					
1524-	GRID	403	-900.	3900.	575.					
1525-	GRID	404	-625.	3900.	575.					
1526-	GRID	405	-575.	3900.	575.					
1527-	GRID	406	-275.	3900.	575.					
1528-	GRID	407	0.	3900.	575.					
1529-	GRID	408	275.	3900.	575.					
1530-	GRID	409	575.	3900.	575.					
1531-	GRID	410	625.	3900.	575.					
1532-	GRID	411	900.	3900.	575.					
1533-	GRID	412	1200.	3900.	575.					
1534-	GRID	413	-625.	3900.	300.					
1535-	GRID	414	-575.	3900.	300.					
1536-	GRID	415	575.	3900.	300.					
1537-	GRID	416	625.	3900.	300.					
1538-	GRID	417	-625.	3900.	0.					
1539-	GRID	418	-575.	3900.	0.					
1540-	GHID	419	575.	3900.	0.					
1541-	GRID	420	625.	3900.	0.					
1542-	GRID	421	-1200.	4200.	625.					
1543-	GRID	422	-900.	4200.	625.					
1544-	GHID	423	-625.	4200.	625.					
1545-	GRID	424	-575.	4200.	625.					
1546-	GRID	425	-275.	4200.	625.					
1547-	GRID	426	0.	4200.	625.					
1548-	GRID	427	275.	4200.	625.					
1549-	GRID	428	575.	4200.	625.					
1550-	GRID	429	625.	4200.	625.					
1551-	GRID	430	900.	4200.	625.					
1552-	GRID	431	1200.	4200.	625.					
1553-	GRID	432	-1200.	4200.	575.					
1554-	GRID	433	-900.	4200.	575.					
1555-	GRID	434	-625.	4200.	575.					
1556-	GRID	435	-575.	4200.	575.					
1557-	GRID	436	-275.	4200.	575.					
1558-	GRID	437	0.	4200.	575.					
1559-	GRID	438	275.	4200.	575.					
1560-	GRID	439	575.	4200.	575.					
1561-	GRID	440	625.	4200.	575.					
1562-	GRID	441	900.	4200.	575.					
1563-	GRID	442	1200.	4200.	575.					
1564-	GRID	443	-625.	4200.	300.					
1565-	GRID	444	-575.	4200.	300.					
1566-	GRID	445	575.	4200.	300.					
1567-	GRID	446	625.	4200.	300.					
1568-	GRID	447	-625.	4200.	0.					
1569-	GRID	448	-575.	4200.	0.					
1570-	GRID	449	575.	4200.	0.					
1571-	GRID	450	625.	4200.	0.					
1572-	GRID	451	-1200.	4500.	625.					
1573-	GHID	452	-900.	4500.	625.					
1574-	GRID	453	-625.	4500.	625.					
1575-	GRID	454	-575.	4500.	625.					
1576-	GRID	455	-275.	4500.	625.					
1577-	GRID	456	0.	4500.	625.					
1578-	GRID	457	275.	4500.	625.					
1579-	GRID	458	575.	4500.	625.					
1580-	GHID	459	625.	4500.	625.					
1581-	GRID	460	900.	4500.	625.					
1582-	GRID	461	1200.	4500.	625.					
1583-	GRID	462	-1200.	4500.	575.					
1584-	GRID	463	-900.	4500.	575.					
1585-	GRID	464	-625.	4500.	575.					
1586-	GRID	465	-575.	4500.	575.					
1587-	GRID	466	-275.	4500.	575.					
1588-	GRID	467	0.	4500.	575.					
1589-	GRID	468	275.	4500.	575.					
1590-	GRID	469	575.	4500.	575.					
1591-	GRID	470	625.	4500.	575.					
1592-	GRID	471	900.	4500.	575.					
1593-	GRID	472	1200.	4500.	575.					
1594-	GRID	473	-625.	4500.	300.					
1595-	GRID	474	-575.	4500.	300.					
1596-	GRID	475	575.	4500.	300.					
1597-	GRID	476	625.	4500.	300.					
1598-	GRID	477	-625.	4500.	0.					
1599-	GRID	478	-575.	4500.	0.					
1600-	GRID	479	575.	4500.	0.					

S O R T E D B U L K D A T A E C H O

CARD	1	2	3	4	5	6	7	8	9	10
1601-	GRID	480	625.	4500.	0.					
1602-	GRID	481	-1200.	4800.	625.					
1603-	GRID	482	-900.	4800.	625.					
1604-	GRID	483	-625.	4800.	625.					
1605-	GRID	484	-575.	4800.	625.					
1606-	GRID	485	-275.	4800.	625.					
1607-	GRID	486	0.	4800.	625.					
1608-	GRID	487	275.	4800.	625.					
1609-	GRID	488	575.	4800.	625.					
1610-	GRID	489	625.	4800.	625.					
1611-	GRID	490	900.	4800.	625.					
1612-	GRID	491	1200.	4800.	625.					
1613-	GRID	492	-1200.	4800.	575.					
1614-	GRID	493	-900.	4800.	575.					
1615-	GRID	494	-625.	4800.	575.					
1616-	GRID	495	-575.	4800.	575.					
1617-	GRID	496	-275.	4800.	575.					
1618-	GRID	497	0.	4800.	575.					
1619-	GRID	498	275.	4800.	575.					
1620-	GRID	499	575.	4800.	575.					
1621-	GRID	500	625.	4800.	575.					
1622-	GRID	501	900.	4800.	575.					
1623-	GRID	502	1200.	4800.	575.					
1624-	GRID	503	-625.	4800.	300.					
1625-	GRID	504	-575.	4800.	300.					
1626-	GRID	505	575.	4800.	300.					
1627-	GRID	506	625.	4800.	300.					
1628-	GRID	507	-625.	4800.	0.					
1629-	GRID	508	-575.	4800.	0.					
1630-	GRID	509	575.	4800.	0.					
1631-	GRID	510	625.	4800.	0.					
1632-	GRID	511	-1200.	5100.	625.					
1633-	GRID	512	-900.	5100.	625.					
1634-	GRID	513	-625.	5100.	625.					
1635-	GRID	514	-575.	5100.	625.					
1636-	GRID	515	-275.	5100.	625.					
1637-	GRID	516	0.	5100.	625.					
1638-	GRID	517	275.	5100.	625.					
1639-	GRID	518	575.	5100.	625.					
1640-	GRID	519	625.	5100.	625.					
1641-	GRID	520	900.	5100.	625.					
1642-	GHTD	521	1200.	5100.	625.					
1643-	GRID	522	-1200.	5100.	575.					
1644-	GRID	523	-900.	5100.	575.					
1645-	GRID	524	-625.	5100.	575.					
1646-	GRID	525	-575.	5100.	575.					
1647-	GRID	526	-275.	5100.	575.					
1648-	GRID	527	0.	5100.	575.					
1649-	GRID	528	275.	5100.	575.					
1650-	GRID	529	575.	5100.	575.					
1651-	GRID	530	625.	5100.	575.					
1652-	GRID	531	900.	5100.	575.					
1653-	GRID	532	1200.	5100.	575.					
1654-	GRID	533	-625.	5100.	300.					
1655-	GRID	534	-575.	5100.	300.					
1656-	GRID	535	575.	5100.	300.					
1657-	GRID	536	625.	5100.	300.					
1658-	GRID	537	-625.	5100.	0.					
1659-	GRID	538	-575.	5100.	0.					
1660-	GRID	539	575.	5100.	0.					
1661-	GRID	540	625.	5100.	0.					
1662-	GRID	541	-1200.	5400.	625.					
1663-	GRID	542	-900.	5400.	625.					
1664-	GRID	543	-625.	5400.	625.					
1665-	GRID	544	-575.	5400.	625.					
1666-	GRID	545	-275.	5400.	625.					
1667-	GRID	546	0.	5400.	625.					
1668-	GRID	547	275.	5400.	625.					
1669-	GRID	548	575.	5400.	625.					
1670-	GRID	549	625.	5400.	625.					
1671-	GRID	550	900.	5400.	625.					
1672-	GRID	551	1200.	5400.	625.					
1673-	GRID	552	-1200.	5400.	575.					
1674-	GRID	553	-900.	5400.	575.					
1675-	GRID	554	-625.	5400.	575.					
1676-	GRID	555	-575.	5400.	575.					
1677-	GHTD	556	-275.	5400.	575.					
1678-	GRID	557	0.	5400.	575.					
1679-	GRID	558	275.	5400.	575.					
1680-	GRID	559	575.	5400.	575.					
1681-	GRID	560	625.	5400.	575.					
1682-	GRID	561	900.	5400.	575.					
1683-	GRID	562	1200.	5400.	575.					
1684-	GRID	563	-625.	5400.	300.					
1685-	GRID	564	-575.	5400.	300.					
1686-	GRID	565	575.	5400.	300.					
1687-	GRID	566	625.	5400.	300.					
1688-	GRID	567	-625.	5400.	0.					
1689-	GRID	568	-575.	5400.	0.					
1690-	GRID	569	575.	5400.	0.					
1691-	GRID	570	625.	5400.	0.					
1692-	GRID	571	-1200.	5700.	625.					
1693-	GRID	572	-900.	5700.	625.					
1694-	GRID	573	-625.	5700.	625.					
1695-	GRID	574	-575.	5700.	625.					
1696-	GRID	575	-275.	5700.	625.					
1697-	GRID	576	0.	5700.	625.					
1698-	GRID	577	275.	5700.	625.					
1699-	GRID	578	575.	5700.	625.					
1700-	GHTD	579	625.	5700.	625.					

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1701-	GRID	590	900.	5700.	625.					
1702-	GRID	581	1200.	5700.	625.					
1703-	GRID	582	-1200.	5700.	575.					
1704-	GRID	583	-900.	5700.	575.					
1705-	GRID	584	-625.	5700.	575.					
1706-	GRID	585	-575.	5700.	575.					
1707-	GRID	586	-275.	5700.	575.					
1708-	GRID	587	0.	5700.	575.					
1709-	GRID	588	275.	5700.	575.					
1710-	GRID	589	575.	5700.	575.					
1711-	GRID	590	625.	5700.	575.					
1712-	GRID	591	900.	5700.	575.					
1713-	GRID	592	1200.	5700.	575.					
1714-	GRID	593	-625.	5700.	300.					
1715-	GRID	594	-575.	5700.	300.					
1716-	GRID	595	575.	5700.	300.					
1717-	GRID	596	625.	5700.	300.					
1718-	GRID	597	-625.	5700.	0.					
1719-	GRID	598	-575.	5700.	0.					
1720-	GRID	599	575.	5700.	0.					
1721-	GRID	600	625.	5700.	0.					
1722-	GRID	601	-1200.	6000.	625.					
1723-	GRID	602	-900.	6000.	625.					
1724-	GRID	603	-625.	6000.	625.					
1725-	GRID	604	-575.	6000.	625.					
1726-	GRID	605	-275.	6000.	625.					
1727-	GRID	606	0.	6000.	625.					
1728-	GRID	607	275.	6000.	625.					
1729-	GRID	608	575.	6000.	625.					
1730-	GRID	609	625.	6000.	625.					
1731-	GRID	610	900.	6000.	625.					
1732-	GRID	611	1200.	6000.	625.					
1733-	GRID	612	-1200.	6000.	575.					
1734-	GRID	613	-900.	6000.	575.					
1735-	GRID	614	-625.	6000.	575.					
1736-	GRID	615	-575.	6000.	575.					
1737-	GRID	616	-275.	6000.	575.					
1738-	GRID	617	0.	6000.	575.					
1739-	GRID	618	275.	6000.	575.					
1740-	GRID	619	575.	6000.	575.					
1741-	GRID	620	625.	6000.	575.					
1742-	GRID	621	900.	6000.	575.					
1743-	GRID	622	1200.	6000.	575.					
1744-	GRID	623	-625.	6000.	300.					
1745-	GRID	624	-575.	6000.	300.					
1746-	GRID	625	575.	6000.	300.					
1747-	GRID	626	625.	6000.	300.					
1748-	GRID	627	-625.	6000.	0.					
1749-	GRID	628	-575.	6000.	0.					
1750-	GRID	629	575.	6000.	0.					
1751-	GRID	630	625.	6000.	0.					
1752-	GRID	631	-1200.	6300.	625.					
1753-	GRID	632	-900.	6300.	625.					
1754-	GRID	633	-625.	6300.	625.					
1755-	GRID	634	-575.	6300.	625.					
1756-	GRID	635	-275.	6300.	625.					
1757-	GRID	636	0.	6300.	625.					
1758-	GRID	637	275.	6300.	625.					
1759-	GRID	638	575.	6300.	625.					
1760-	GRID	639	625.	6300.	625.					
1761-	GRID	640	900.	6300.	625.					
1762-	GRID	641	1200.	6300.	625.					
1763-	GRID	642	-1200.	6300.	575.					
1764-	GRID	643	-900.	6300.	575.					
1765-	GRID	644	-625.	6300.	575.					
1766-	GRID	645	-575.	6300.	575.					
1767-	GRID	646	-275.	6300.	575.					
1768-	GRID	647	0.	6300.	575.					
1769-	GRID	648	275.	6300.	575.					
1770-	GRID	649	575.	6300.	575.					
1771-	GRID	650	625.	6300.	575.					
1772-	GRID	651	900.	6300.	575.					
1773-	GRID	652	1200.	6300.	575.					
1774-	GRID	653	-625.	6300.	300.					
1775-	GRID	654	-575.	6300.	300.					
1776-	GRID	655	575.	6300.	300.					
1777-	GRID	656	625.	6300.	300.					
1778-	GRID	657	-625.	6300.	0.					
1779-	GRID	658	-575.	6300.	0.					
1780-	GRID	659	575.	6300.	0.					
1781-	GRID	660	625.	6300.	0.					
1782-	GRID	661	-1200.	6600.	625.					
1783-	GRID	662	-900.	6600.	625.					
1784-	GRID	663	-625.	6600.	625.					
1785-	GRID	664	-375.	6600.	625.					
1786-	GRID	665	-275.	6600.	625.					
1787-	GRID	666	0.	6600.	625.					
1788-	GRID	667	275.	6600.	625.					
1789-	GRID	668	575.	6600.	625.					
1790-	GRID	669	625.	6600.	625.					
1791-	GRID	670	900.	6600.	625.					
1792-	GRID	671	1200.	6600.	625.					
1793-	GRID	672	-1200.	6600.	575.					
1794-	GRID	673	-900.	6600.	575.					
1795-	GRID	674	-625.	6600.	575.					
1796-	GRID	675	-575.	6600.	575.					
1797-	GRID	676	-275.	6600.	575.					
1798-	GRID	677	0.	6600.	575.					
1799-	GRID	678	275.	6600.	575.					
1800-	GRID	679	575.	6600.	575.					

SORTED BULK DATA ECHO

CARD		S O R T E D B U L K D A T A E C H O									
COUNT	1	2	3	4	5	6	7	8	9	10	
1801-	GRID	680	625.	6600.	625.						
1802-	GRID	681	900.	6600.	575.						
1803-	GRID	682	1200.	6600.	575.						
1804-	GRID	683	-625.	6600.	300.						
1805-	GRID	684	-575.	6600.	300.						
1806-	GRID	685	575.	6600.	300.						
1807-	GRID	686	-625.	6600.	300.						
1808-	GRID	687	-625.	6600.	0.						
1809-	GRID	688	-575.	6600.	0.						
1810-	GRID	689	575.	6600.	0.						
1811-	GRID	690	625.	6600.	0.						
1812-	GRID	691	-1200.	6900.	625.						
1813-	GRID	692	-900.	6900.	625.						
1814-	GRID	693	-625.	6900.	625.						
1815-	GRID	694	-575.	6900.	625.						
1816-	GRID	695	-275.	6900.	625.						
1817-	GRID	696	0.	6900.	625.						
1818-	GRID	697	275.	6900.	625.						
1819-	GRID	698	575.	6900.	625.						
1820-	GRID	699	625.	6900.	625.						
1821-	GRID	700	900.	6900.	625.						
1822-	GRID	701	1200.	6900.	625.						
1823-	GRID	702	-1200.	6900.	575.						
1824-	GRID	703	-900.	6900.	575.						
1825-	GRID	704	-625.	6900.	575.						
1826-	GRID	705	-575.	6900.	575.						
1827-	GRID	706	-275.	6900.	575.						
1828-	GRID	707	0.	6900.	575.						
1829-	GRID	708	275.	6900.	575.						
1830-	GRID	709	575.	6900.	575.						
1831-	GRID	710	625.	6900.	575.						
1832-	GRID	711	900.	6900.	575.						
1833-	GRID	712	-1200.	6900.	575.						
1834-	GRID	713	-625.	6900.	300.						
1835-	GRID	714	-575.	6900.	300.						
1836-	GRID	715	575.	6900.	300.						
1837-	GRID	716	625.	6900.	300.						
1838-	GRID	717	-625.	6900.	0.						
1839-	GRID	718	-575.	6900.	0.						
1840-	GRID	719	575.	6900.	0.						
1841-	GRID	720	625.	6900.	0.						
1842-	GRID	721	-1200.	7200.	625.						
1843-	GRID	722	-900.	7200.	625.						
1844-	GRID	723	-625.	7200.	625.						
1845-	GRID	724	-575.	7200.	625.						
1846-	GRID	725	-275.	7200.	625.						
1847-	GRID	726	0.	7200.	625.						
1848-	GRID	727	275.	7200.	625.						
1849-	GRID	728	575.	7200.	625.						
1850-	GRID	729	625.	7200.	625.						
1851-	GRID	730	900.	7200.	625.						
1852-	GRID	731	1200.	7200.	625.						
1853-	GRID	732	-1200.	7200.	575.						
1854-	GRID	733	-900.	7200.	575.						
1855-	GRID	734	-625.	7200.	575.						
1856-	GRID	735	-575.	7200.	575.						
1857-	GRID	736	-275.	7200.	575.						
1858-	GRID	737	0.	7200.	575.						
1859-	GRID	738	275.	7200.	575.						
1860-	GRID	739	575.	7200.	575.						
1861-	GRID	740	625.	7200.	575.						
1862-	GRID	741	900.	7200.	575.						
1863-	GRID	742	1200.	7200.	575.						
1864-	GRID	743	-625.	7200.	300.						
1865-	GRID	744	-575.	7200.	300.						
1866-	GRID	745	575.	7200.	300.						
1867-	GRID	746	625.	7200.	300.						
1868-	GRID	747	-625.	7200.	0.						
1869-	GRID	748	-575.	7200.	0.						
1870-	GRID	749	575.	7200.	0.						
1871-	GRID	750	625.	7200.	0.						
1872-	GRID	751	-1200.	7500.	625.						
1873-	GRID	752	-900.	7500.	625.						
1874-	GRID	753	-625.	7500.	625.						
1875-	GRID	754	-575.	7500.	625.						
1876-	GRID	755	-275.	7500.	625.						
1877-	GRID	756	0.	7500.	625.						
1878-	GRID	757	275.	7500.	625.						
1879-	GRID	758	575.	7500.	625.						
1880-	GRID	759	625.	7500.	625.						
1881-	GRID	760	900.	7500.	625.						
1882-	GRID	761	1200.	7500.	625.						
1883-	GRID	762	-1200.	7500.	575.						
1884-	GRID	763	-900.	7500.	575.						
1885-	GRID	764	-625.	7500.	575.						
1886-	GRID	765	-575.	7500.	575.						
1887-	GRID	766	-275.	7500.	575.						
1888-	GRID	767	0.	7500.	575.						
1889-	GRID	768	275.	7500.	575.						
1890-	GRID	769	575.	7500.	575.						
1891-	GRID	770	625.	7500.	575.						
1892-	GRID	771	900.	7500.	575.						
1893-	GRID	772	1200.	7500.	575.						
1894-	GRID	773	-625.	7500.	300.						
1895-	GRID	774	-575.	7500.	300.						
1896-	GRID	775	575.	7500.	300.						
1897-	GRID	776	625.	7500.	300.						
1898-	GRID	777	-625.	7500.	0.						
1899-	GRID	778	-575.	7500.	0.						
1900-	GRID	779	575.	7500.	0.						

CARD	1	2	3	4	5	6	7	8	9	10
1901-	GRID	780	625.	7500.	0.					
1902-	GRID	781	-1200.	7800.	625.					
1903-	GRID	782	-900.	7800.	625.					
1904-	GRID	783	-625.	7800.	625.					
1905-	GRID	784	-575.	7800.	625.					
1906-	GRID	785	-275.	7800.	625.					
1907-	GRID	786	0.	7800.	625.					
1908-	GRID	787	275.	7800.	625.					
1909-	GRID	788	575.	7800.	625.					
1910-	GRID	789	625.	7800.	625.					
1911-	GRID	790	900.	7800.	625.					
1912-	GRID	791	1200.	7800.	625.					
1913-	GRID	792	-1200.	7800.	575.					
1914-	GRID	793	-900.	7800.	575.					
1915-	GRID	794	-625.	7900.	575.					
1916-	GRID	795	-575.	7800.	575.					
1917-	GRID	796	-275.	7800.	575.					
1918-	GRID	797	0.	7800.	575.					
1919-	GRID	798	275.	7800.	575.					
1920-	GRID	799	575.	7800.	575.					
1921-	GRID	800	625.	7800.	575.					
1922-	GRID	801	900.	7800.	575.					
1923-	GRID	802	1200.	7800.	575.					
1924-	GRID	803	-625.	7800.	300.					
1925-	GRID	804	-575.	7800.	300.					
1926-	GRID	805	575.	7800.	300.					
1927-	GRID	806	625.	7800.	300.					
1928-	GRID	807	-625.	7800.	0.					
1929-	GRID	808	-575.	7800.	0.					
1930-	GRID	809	575.	7800.	0.					
1931-	GRID	810	625.	7800.	0.					
1932-	GRID	811	-1200.	8100.	625.					
1933-	GRID	812	-900.	8100.	625.					
1934-	GRID	813	-625.	8100.	625.					
1935-	GRID	814	-575.	8100.	625.					
1936-	GRID	815	-275.	8100.	625.					
1937-	GRID	816	0.	8100.	625.					
1938-	GRID	817	275.	8100.	625.					
1939-	GRID	818	575.	8100.	625.					
1940-	GRID	819	625.	8100.	625.					
1941-	GRID	820	900.	8100.	625.					
1942-	GRID	821	1200.	8100.	625.					
1943-	GRID	822	-1200.	8100.	575.					
1944-	GRID	823	-900.	8100.	575.					
1945-	GRID	824	-625.	8100.	575.					
1946-	GRID	825	-575.	8100.	575.					
1947-	GRID	826	-275.	8100.	575.					
1948-	GRID	827	0.	8100.	575.					
1949-	GRID	828	275.	8100.	575.					
1950-	GRID	829	575.	8100.	575.					
1951-	GRID	830	625.	8100.	575.					
1952-	GRID	831	900.	8100.	575.					
1953-	GRID	832	1200.	8100.	575.					
1954-	GRID	833	-625.	8100.	300.					
1955-	GRID	834	-575.	8100.	300.					
1956-	GRID	835	575.	8100.	300.					
1957-	GRID	836	625.	8100.	300.					
1958-	GRID	837	-625.	8100.	0.					
1959-	GRID	838	-575.	8100.	0.					
1960-	GRID	839	575.	8100.	0.					
1961-	GRID	840	625.	8100.	0.					
1962-	GRID	841	-1200.	8400.	625.					
1963-	GRID	842	-900.	8400.	625.					
1964-	GRID	843	-625.	8400.	625.					
1965-	GRID	844	-575.	8400.	625.					
1966-	GRID	845	-275.	8400.	625.					
1967-	GRID	846	0.	8400.	625.					
1968-	GRID	847	275.	8400.	625.					
1969-	GRID	848	575.	8400.	625.					
1970-	GRID	849	625.	8400.	625.					
1971-	GRID	850	900.	8400.	625.					
1972-	GRID	851	1200.	8400.	625.					
1973-	GRID	852	-1200.	8400.	575.					
1974-	GRID	853	-900.	8400.	575.					
1975-	GRID	854	-625.	8400.	575.					
1976-	GRID	855	-575.	8400.	575.					
1977-	GRID	856	-275.	8400.	575.					
1978-	GRID	857	0.	8400.	575.					
1979-	GRID	858	275.	8400.	575.					
1980-	GRID	859	575.	8400.	575.					
1981-	GRID	860	625.	8400.	575.					
1982-	CRTD	861	900.	8400.	575.					
1983-	GRID	862	1200.	8400.	575.					
1984-	GRID	863	-625.	8400.	300.					
1985-	GRID	864	-575.	8400.	300.					
1986-	GRID	865	575.	8400.	300.					
1987-	GRID	866	625.	8400.	300.					
1988-	GRID	867	-625.	8400.	0.					
1989-	GRID	868	-575.	8400.	0.					
1990-	GRID	869	575.	8400.	0.					
1991-	GRID	870	625.	8400.	0.					
1992-	GRID	871	-1200.	8700.	625.					
1993-	GRID	872	-900.	8700.	625.					
1994-	GRID	873	-625.	8700.	625.					
1995-	GRID	874	-575.	8700.	625.					
1996-	GRID	875	-275.	8700.	625.					
1997-	GRID	876	0.	8700.	625.					
1998-	GRID	877	275.	8700.	625.					
1999-	GRID	878	575.	9700.	625.					
2000-	GRID	879	625.	8700.	625.					

CARD	S O R T E D B U L K D A T A E C H O									
COUNT	1	2	3	4	5	6	7	8	9	10
2001-	GRID	880		900.	8700.	625.				
2002-	GRID	881		1200.	8700.	625.				
2003-	GRID	882		-1200.	8700.	575.				
2004-	GRID	883		-900.	8700.	575.				
2005-	GRID	884		-625.	8700.	575.				
2006-	GRID	885		-575.	8700.	575.				
2007-	GRID	886		-275.	8700.	575.				
2008-	GRID	887		0.	8700.	575.				
2009-	GRID	888		275.	8700.	575.				
2010-	GRID	889		575.	8700.	575.				
2011-	GRID	890		625.	8700.	575.				
2012-	GRID	891		900.	8700.	575.				
2013-	GRID	892		1200.	8700.	575.				
2014-	GRID	893		-625.	8700.	300.				
2015-	GRID	894		-575.	8700.	300.				
2016-	GRID	895		575.	8700.	300.				
2017-	GRID	896		625.	8700.	300.				
2018-	GRID	897		-625.	8700.	0.				
2019-	GRID	898		-575.	8700.	0.				
2020-	GRID	899		575.	8700.	0.				
2021-	GRID	900		625.	8700.	0.				
2022-	GRID	901		-1200.	9000.	625.				13456
2023-	GRID	902		-900.	9000.	625.				13456
2024-	GRID	903		-625.	9000.	625.				13456
2025-	GRID	904		-575.	9000.	625.				13456
2026-	GRID	905		-275.	9000.	625.				13456
2027-	GRID	906		0.	9000.	625.				13456
2028-	GRID	907		275.	9000.	625.				13456
2029-	GRID	908		575.	9000.	625.				13456
2030-	GRID	909		625.	9000.	625.				13456
2031-	GRID	910		900.	9000.	625.				13456
2032-	GRID	911		1200.	9000.	625.				13456
2033-	GRID	912		-1200.	9000.	575.				13456
2034-	GRID	913		-900.	9000.	575.				13456
2035-	GRID	914		-625.	9000.	575.				13456
2036-	GRID	915		-575.	9000.	575.				13456
2037-	GRID	916		-275.	9000.	575.				13456
2038-	GRID	917		0.	9000.	575.				13456
2039-	GRID	918		275.	9000.	575.				13456
2040-	GRID	919		575.	9000.	575.				13456
2041-	GRID	920		625.	9000.	575.				13456
2042-	GRID	921		900.	9000.	575.				13456
2043-	GRID	922		1200.	9000.	575.				13456
2044-	GRID	923		-625.	9000.	300.				13456
2045-	GRID	924		-575.	9000.	300.				13456
2046-	GRID	925		575.	9000.	300.				13456
2047-	GRID	926		625.	9000.	300.				13456
2048-	GRID	927		-625.	9000.	0.				13456
2049-	GRID	928		-575.	9000.	0.				13456
2050-	GRID	929		575.	9000.	0.				13456
2051-	GRID	930		625.	9000.	0.				13456
2052-	GRID	931		-1200.	9300.	625.				
2053-	GRID	932		-900.	9300.	625.				
2054-	GRID	933		-625.	9300.	625.				
2055-	GRID	934		-575.	9300.	625.				
2056-	GRID	935		-275.	9300.	625.				
2057-	GRID	936		0.	9300.	625.				
2058-	GRID	937		275.	9300.	625.				
2059-	GRID	938		575.	9300.	625.				
2060-	GRID	939		625.	9300.	625.				
2061-	GRID	940		900.	9300.	625.				
2062-	GRID	941		1200.	9300.	625.				
2063-	GRID	942		-1200.	9300.	575.				
2064-	GRID	943		-900.	9300.	575.				
2065-	GRID	944		-625.	9300.	575.				
2066-	GRID	945		-575.	9300.	575.				
2067-	GRID	946		-275.	9300.	575.				
2068-	GRID	947		0.	9300.	575.				
2069-	GRID	948		275.	9300.	575.				
2070-	GRID	949		575.	9300.	575.				
2071-	GRID	950		625.	9300.	575.				
2072-	GRID	951		900.	9300.	575.				
2073-	GRID	952		1200.	9300.	575.				
2074-	GRID	953		-625.	9300.	300.				
2075-	GRID	954		-575.	9300.	300.				
2076-	GRID	955		575.	9300.	300.				
2077-	GRID	956		625.	9300.	300.				
2078-	GRID	957		-625.	9300.	0.				
2079-	GRID	958		-575.	9300.	0.				
2080-	GRID	959		575.	9300.	0.				
2081-	GRID	960		625.	9300.	0.				
2082-	GRID	961		-1200.	9600.	625.				
2083-	GRID	962		-900.	9600.	625.				
2084-	GRID	963		-625.	9600.	625.				
2085-	GRID	964		-575.	9600.	625.				
2086-	GRID	965		-275.	9600.	625.				
2087-	GRID	966		0.	9600.	625.				
2088-	GRID	967		275.	9600.	625.				
2089-	GRID	968		575.	9600.	625.				
2090-	GRID	969		625.	9600.	625.				
2091-	GRID	970		900.	9600.	625.				
2092-	GRID	971		1200.	9600.	625.				
2093-	GRID	972		-1200.	9600.	575.				
2094-	GRID	973		-900.	9600.	575.				
2095-	GRID	974		-625.	9600.	575.				
2096-	GRID	975		-575.	9600.	575.				
2097-	GRID	976		-275.	9600.	575.				
2098-	GRID	977		0.	9600.	575.				
2099-	GRID	978		275.	9600.	575.				
2100-	GRID	979		575.	9600.	575.				

CARD COUNT	1	2	3	4	5	6	7	8	9	10
2101-	GRID	980	625.	9600.	575.					
2102-	GRID	981	900.	9600.	575.					
2103-	GRID	982	1200.	9600.	575.					
2104-	GRID	983	-625.	9600.	300.					
2105-	GRID	984	-575.	9600.	300.					
2106-	GRID	985	575.	9600.	300.					
2107-	GRID	986	625.	9600.	300.					
2108-	GRID	987	-625.	9600.	0.					
2109-	GRID	988	-575.	9600.	0.					
2110-	GRID	989	575.	9600.	0.					
2111-	GRID	990	625.	9600.	0.					
2112-	GRID	991	-1200.	9900.	625.					
2113-	GRID	992	-900.	9900.	625.					
2114-	GRID	993	-625.	9900.	625.					
2115-	GRID	994	-575.	9900.	625.					
2116-	GRID	995	-275.	9900.	625.					
2117-	GRID	996	0.	9900.	625.					
2118-	GRID	997	275.	9900.	625.					
2119-	GRID	998	575.	9900.	625.					
2120-	GRID	999	625.	9900.	625.					
2121-	GRID	1000	900.	9900.	625.					
2122-	GRID	1001	1200.	9900.	625.					
2123-	GRID	1002	-1200.	9900.	575.					
2124-	GRID	1003	-900.	9900.	575.					
2125-	GRID	1004	-625.	9900.	575.					
2126-	GRID	1005	-575.	9900.	575.					
2127-	GRID	1006	-275.	9900.	575.					
2128-	GRID	1007	0.	9900.	575.					
2129-	GRID	1008	275.	9900.	575.					
2130-	GRID	1009	575.	9900.	575.					
2131-	GRID	1010	625.	9900.	575.					
2132-	GRID	1011	900.	9900.	575.					
2133-	GRID	1012	1200.	9900.	575.					
2134-	GRID	1013	-625.	9900.	300.					
2135-	GRID	1014	-575.	9900.	300.					
2136-	GRID	1015	575.	9900.	300.					
2137-	GRID	1016	625.	9900.	300.					
2138-	GRID	1017	-625.	9900.	0.					
2139-	GRID	1018	-575.	9900.	0.					
2140-	GRID	1019	575.	9900.	0.					
2141-	GRID	1020	625.	9900.	0.					
2142-	GRID	1021	-1200.	10200.	625.					
2143-	GRID	1022	-900.	10200.	625.					
2144-	GRID	1023	-625.	10200.	625.					
2145-	GRID	1024	-575.	10200.	625.					
2146-	GRID	1025	-275.	10200.	625.					
2147-	GRID	1026	0.	10200.	625.					
2148-	GRID	1027	275.	10200.	625.					
2149-	GRID	1028	575.	10200.	625.					
2150-	GRID	1029	625.	10200.	625.					
2151-	GRID	1030	900.	10200.	625.					
2152-	GRID	1031	1200.	10200.	625.					
2153-	GRID	1032	-1200.	10200.	575.					
2154-	GRID	1033	-900.	10200.	575.					
2155-	GRID	1034	-625.	10200.	575.					
2156-	GRID	1035	-575.	10200.	575.					
2157-	GRID	1036	-275.	10200.	575.					
2158-	GRID	1037	0.	10200.	575.					
2159-	GRID	1038	275.	10200.	575.					
2160-	GRID	1039	575.	10200.	575.					
2161-	GRID	1040	625.	10200.	575.					
2162-	GRID	1041	900.	10200.	575.					
2163-	GRID	1042	1200.	10200.	575.					
2164-	GRID	1043	-625.	10200.	300.					
2165-	GRID	1044	-575.	10200.	300.					
2166-	GRID	1045	575.	10200.	300.					
2167-	GRID	1046	625.	10200.	300.					
2168-	GRID	1047	-625.	10200.	0.					
2169-	GRID	1048	-575.	10200.	0.					
2170-	GRID	1049	575.	10200.	0.					
2171-	GRID	1050	625.	10200.	0.					
2172-	GRID	1051	-1200.	10500.	625.					
2173-	GRID	1052	-900.	10500.	625.					
2174-	GRID	1053	-625.	10500.	625.					
2175-	GRID	1054	-575.	10500.	625.					
2176-	GRID	1055	-275.	10500.	625.					
2177-	GRID	1056	0.	10500.	625.					
2178-	GRID	1057	275.	10500.	625.					
2179-	GRID	1058	575.	10500.	625.					
2180-	GRID	1059	625.	10500.	625.					
2181-	GRID	1060	900.	10500.	625.					
2182-	GRID	1061	1200.	10500.	625.					
2183-	GRID	1062	-1200.	10500.	575.					
2184-	GRID	1063	-900.	10500.	575.					
2185-	GRID	1064	-625.	10500.	575.					
2186-	GRID	1065	-575.	10500.	575.					
2187-	GRID	1066	-275.	10500.	575.					
2188-	GRID	1067	0.	10500.	575.					
2189-	GRID	1068	275.	10500.	575.					
2190-	GRID	1069	575.	10500.	575.					
2191-	GRID	1070	625.	10500.	575.					
2192-	GRID	1071	900.	10500.	575.					
2193-	GRID	1072	1200.	10500.	575.					
2194-	GRID	1073	-625.	10500.	300.					
2195-	GRID	1074	-575.	10500.	300.					
2196-	GRID	1075	575.	10500.	300.					
2197-	GRID	1076	625.	10500.	300.					
2198-	GRID	1077	-625.	10500.	0.					
2199-	GRID	1078	-575.	10500.	0.					
2200-	GRID	1079	575.	10500.	0.					

CARD COUNT		1	2	3	4	5	6	7	8	9	10
2201-	GRID	1080			625.	10500.	0.				
2202-	GRID	1081			-1200.	10800.	625.				
2203-	GRID	1082			-900.	10800.	625.				
2204-	GRID	1083			-625.	10800.	625.				
2205-	GRID	1084			-575.	10800.	625.				
2206-	GRID	1085			-275.	10800.	625.				
2207-	GRID	1086			0.	10800.	625.				
2208-	GRID	1087			275.	10800.	625.				
2209-	GRID	1088			575.	10800.	625.				
2210-	GRID	1089			625.	10800.	625.				
2211-	GRID	1090			900.	10800.	625.				
2212-	GRID	1091			1200.	10800.	625.				
2213-	GRID	1092			-1200.	10800.	575.				
2214-	GRID	1093			-900.	10800.	575.				
2215-	GRID	1094			-625.	10800.	575.				
2216-	GRID	1095			-575.	10800.	575.				
2217-	GRID	1096			-275.	10800.	575.				
2218-	GRID	1097			0.	10800.	575.				
2219-	GRID	1098			275.	10800.	575.				
2220-	GRID	1099			575.	10800.	575.				
2221-	GRID	1100			625.	10800.	575.				
2222-	GRID	1101			900.	10800.	575.				
2223-	GRID	1102			1200.	10800.	575.				
2224-	GRID	1103			-625.	10800.	300.				
2225-	GRID	1104			-575.	10800.	300.				
2226-	GRID	1105			575.	10800.	300.				
2227-	GRID	1106			625.	10800.	300.				
2228-	GRID	1107			-625.	10800.	0.				
2229-	GRID	1108			-575.	10800.	0.				
2230-	GRID	1109			575.	10800.	0.				
2231-	GRID	1110			625.	10800.	0.				
2232-	GRID	1111			-1200.	11100.	625.				
2233-	GRID	1112			-900.	11100.	625.				
2234-	GRID	1113			-625.	11100.	625.				
2235-	GRID	1114			-575.	11100.	625.				
2236-	GRID	1115			-275.	11100.	625.				
2237-	GRID	1116			0.	11100.	625.				
2238-	GRID	1117			275.	11100.	625.				
2239-	GRID	1118			575.	11100.	625.				
2240-	GRID	1119			625.	11100.	625.				
2241-	GRID	1120			900.	11100.	625.				
2242-	GRID	1121			1200.	11100.	625.				
2243-	GRID	1122			-1200.	11100.	575.				
2244-	GRID	1123			-900.	11100.	575.				
2245-	GRID	1124			-625.	11100.	575.				
2246-	GRID	1125			-575.	11100.	575.				
2247-	GRID	1126			-275.	11100.	575.				
2248-	GRID	1127			0.	11100.	575.				
2249-	GRID	1128			275.	11100.	575.				
2250-	GRID	1129			575.	11100.	575.				
2251-	GRID	1130			625.	11100.	575.				
2252-	GRID	1131			900.	11100.	575.				
2253-	GRID	1132			1200.	11100.	575.				
2254-	GRID	1133			-625.	11100.	300.				
2255-	GRID	1134			-575.	11100.	300.				
2256-	GRID	1135			575.	11100.	300.				
2257-	GRID	1136			625.	11100.	300.				
2258-	GRID	1137			-625.	11100.	0.				
2259-	GRID	1138			-575.	11100.	0.				
2260-	GRID	1139			575.	11100.	0.				
2261-	GRID	1140			625.	11100.	0.				
2262-	GRID	1141			-1200.	11400.	625.				
2263-	GRID	1142			-900.	11400.	625.				
2264-	GRID	1143			-625.	11400.	625.				
2265-	GRID	1144			-575.	11400.	625.				
2266-	GRID	1145			-275.	11400.	625.				
2267-	GRID	1146			0.	11400.	625.				
2268-	GRID	1147			275.	11400.	625.				
2269-	GRID	1148			575.	11400.	625.				
2270-	GRID	1149			625.	11400.	625.				
2271-	GRID	1150			900.	11400.	625.				
2272-	GRID	1151			1200.	11400.	625.				
2273-	GRID	1152			-1200.	11400.	575.				
2274-	GRID	1153			-900.	11400.	575.				
2275-	GRID	1154			-625.	11400.	575.				
2276-	GRID	1155			-575.	11400.	575.				
2277-	GRID	1156			-275.	11400.	575.				
2278-	GRID	1157			0.	11400.	575.				
2279-	GRID	1158			275.	11400.	575.				
2280-	GRID	1159			575.	11400.	575.				
2281-	GRID	1160			625.	11400.	575.				
2282-	GRID	1161			900.	11400.	575.				
2283-	GRID	1162			1200.	11400.	575.				
2284-	GRID	1163			-625.	11400.	300.				
2285-	GRID	1164			-575.	11400.	300.				
2286-	GRID	1165			575.	11400.	300.				
2287-	GRID	1166			625.	11400.	300.				
2288-	GRID	1167			-625.	11400.	0.				
2289-	GRID	1168			-575.	11400.	0.				
2290-	GRID	1169			575.	11400.	0.				
2291-	GRID	1170			625.	11400.	0.				
2292-	GRID	1171			-1200.	11700.	625.				
2293-	GRID	1172			-900.	11700.	625.				
2294-	GRID	1173			-625.	11700.	625.				
2295-	GRID	1174			-575.	11700.	625.				
2296-	GRID	1175			-275.	11700.	625.				
2297-	GRID	1176			0.	11700.	625.				
2298-	GRID	1177			275.	11700.	625.				
2299-	GRID	1178			575.	11700.	625.				
2300-	GRID	1179			625.	11700.	625.				

S O R T E D B U L K D A T A E C H O

CARD COUNT	1	2	3	4	5	6	7	8	9	10
2301-	GRID	1180	900.	11700.	625.					
2302-	GRID	1181	1200.	11700.	625.					
2303-	GRID	1182	-1200.	11700.	575.					
2304-	GRID	1183	-300.	11700.	575.					
2305-	GRID	1184	-625.	11700.	575.					
2306-	GRID	1185	-575.	11700.	575.					
2307-	GRID	1186	-275.	11700.	575.					
2308-	GRID	1187	0.	11700.	575.					
2309-	GRID	1188	275.	11700.	575.					
2310-	GRID	1189	575.	11700.	575.					
2311-	GRID	1190	625.	11700.	575.					
2312-	GRID	1191	900.	11700.	575.					
2313-	GRID	1192	1200.	11700.	575.					
2314-	GRID	1193	-625.	11700.	300.					
2315-	GRID	1194	-575.	11700.	300.					
2316-	GRID	1195	575.	11700.	300.					
2317-	GRID	1196	625.	11700.	300.					
2318-	GRID	1197	-625.	11700.	0.					
2319-	GRID	1198	-575.	11700.	0.					
2320-	GRID	1199	575.	11700.	0.					
2321-	GRID	1200	625.	11700.	0.					
2322-	GRID	1201	-1200.	12000.	625.			134	56	
2323-	GRID	1202	-900.	12000.	625.			134	56	
2324-	GRID	1203	-625.	12000.	625.			134	56	
2325-	GRID	1204	-575.	12000.	625.			134	56	
2326-	GRID	1205	-275.	12000.	625.			134	56	
2327-	GRID	1206	0.	12000.	625.			134	56	
2328-	GRID	1207	275.	12000.	625.			134	56	
2329-	GRID	1208	575.	12000.	625.			134	56	
2330-	GRID	1209	625.	12000.	625.			134	56	
2331-	GRID	1210	900.	12000.	625.			134	56	
2332-	GRID	1211	1200.	12000.	625.			134	56	
2333-	GRID	1212	-1200.	12000.	575.			134	56	
2334-	GRID	1213	-900.	12000.	575.			134	56	
2335-	GRID	1214	-625.	12000.	575.			134	56	
2336-	GRID	1215	-575.	12000.	575.			134	56	
2337-	GRID	1216	-275.	12000.	575.			134	56	
2338-	PLD	1217	0.	12000.	575.			134	56	
2339-	PLD	1218	275.	12000.	575.			134	56	
2340-	GRID	1219	575.	12000.	575.			134	56	
2341-	GRID	1220	625.	12000.	575.			134	56	
2342-	GRID	1221	900.	12000.	575.			134	56	
2343-	GRID	1222	1200.	12000.	575.			134	56	
2344-	GRID	1223	-625.	12000.	300.			134	56	
2345-	GRID	1224	-575.	12000.	300.			134	56	
2346-	GRID	1225	575.	12000.	300.			134	56	
2347-	GRID	1226	625.	12000.	300.			134	56	
2348-	GRID	1227	-625.	12000.	0.			134	56	
2349-	GRID	1228	-575.	12000.	0.			134	56	
2350-	GRID	1229	575.	12000.	0.			134	56	
2351-	GRID	1230	625.	12000.	0.			134	56	
2352-	MAT1	19	30.	.3				303		334
2353-	PLOADU	100	143	12.				308		339
2354-	PLOADU	100	148	12.				333		364
2355-	PLOADU	100	157	12.				338		369
2356-	PLOADU	100	162	12.				363		394
2357-	PLOADU	100	171	12.				368		399
2358-	PLOAD4	100	176	12.				393		424
2359-	PLOAD4	100	185	12.				398		429
2360-	PLOADU	100	190	12.				423		454
2361-	PLOADU	100	199	12.				428		459
2362-	PLOADU	100	204	12.				453		484
2363-	PLOADU	100	213	12.				458		489
2364-	PLOADU	100	218	12.				483		514
2365-	PLOADU	100	227	12.				488		519
2366-	PLOAD4	100	232	12.				513		544
2367-	PLOAD4	100	241	12.				518		549
2368-	PLOADU	100	245	12.				543		574
2369-	PLOADU	100	255	12.				548		579
2370-	PLOADU	100	260	12.				573		604
2371-	PLOADU	100	269	12.				578		609
2372-	PLOAD4	100	274	12.				603		634
2373-	PLOADU	100	283	12.				608		639
2374-	PLOADU	100	288	12.				633		664
2375-	PLOAD4	100	297	12.				638		669
2376-	PLOAD4	100	302	12.				663		694
2377-	PLOAD4	100	311	12.				668		699
2378-	PLOAD4	100	316	12.				693		724
2379-	PLOADU	100	325	12.				698		729
2380-	PLOAD4	100	330	12.				723		754
2381-	PLOADU	100	339	12.				728		759
2382-	PLOAD4	100	344	12.				753		784
2383-	PLOADU	100	353	12.				758		789
2384-	PLOADU	100	358	12.				783		814
2385-	PLOADU	100	367	12.				788		819
2386-	PLOAD4	100	372	12.				813		844
2387-	PLOADU	100	381	12.				818		849
2388-	PLOADU	100	386	12.				843		874
2389-	PLOAD4	100	395	12.				848		879
2390-	PLOADU	100	400	12.				873		904
2391-	PLOADU	100	409	12.				878		909
2392-	PLOADU	100	414	12.						
2393-	PSOLID	9	19							
2393-	ENDDATA									

TOTAL COUNT= 2394

Input Load Data for Double-Tee Beam Using Solid Element

Model Subjected to Unsymmetrical Load

2353-	LOAD4	100	146	1.	306	337
2354-	LOAD4	100	147	1.	307	338
2355-	LOAD4	100	148	1.	308	339
2356-	LOAD4	100	149	1.	309	340
2357-	LOAD4	100	150	1.	310	341
2358-	LOAD4	100	160	1.	336	367
2359-	LOAD4	100	161	1.	337	368
2360-	LOAD4	100	162	1.	338	369
2361-	LOAD4	100	163	1.	339	370
2362-	LOAD4	100	164	1.	340	371
2363-	LOAD4	100	174	1.	366	397
2364-	LOAD4	100	175	1.	367	398
2365-	LOAD4	100	176	1.	368	399
2366-	LOAD4	100	177	1.	369	400
2367-	LOAD4	100	179	1.	370	401
2368-	LOAD4	100	188	1.	396	427
2369-	LOAD4	100	189	1.	397	428
2370-	LOAD4	100	190	1.	398	429
2371-	LOAD4	100	191	1.	399	430
2372-	LOAD4	100	192	1.	400	431
2373-	LOAD4	100	202	1.	426	457
2374-	LOAD4	100	203	1.	427	458
2375-	LOAD4	100	204	1.	428	459
2376-	LOAD4	100	205	1.	429	460
2377-	LOAD4	100	206	1.	430	461
2378-	LOAD4	100	216	1.	456	487
2379-	LOAD4	100	217	1.	457	488
2380-	LOAD4	100	218	1.	458	489
2381-	LOAD4	100	219	1.	459	490
2382-	LOAD4	100	220	1.	460	491
2383-	LOAD4	100	230	1.	486	517
2384-	LOAD4	100	231	1.	487	518
2385-	LOAD4	100	232	1.	488	519
2386-	LOAD4	100	233	1.	489	520
2387-	LOAD4	100	234	1.	490	521
2388-	LOAD4	100	244	1.	516	547
2389-	LOAD4	100	245	1.	517	548
2390-	LOAD4	100	246	1.	518	549
2391-	LOAD4	100	247	1.	519	550
2392-	LOAD4	100	248	1.	520	551
2393-	LOAD4	100	258	1.	546	577
2394-	LOAD4	100	259	1.	547	578
2395-	LOAD4	100	260	1.	548	579
2396-	LOAD4	100	261	1.	549	580
2397-	LOAD4	100	262	1.	550	581
2398-	LOAD4	100	272	1.	576	607
2399-	LOAD4	100	273	1.	577	608
2400-	LOAD4	100	274	1.	578	609
2401-	LOAD4	100	275	1.	579	610
2402-	LOAD4	100	276	1.	580	611

Note: All other input data are the same as in symmetrical load case.

Input Data for Double-Tee Beam Using Three-Plate Beam
Element Model Subjected to Symmetrical Load

MASTRAN EXECUTIVE CONTROL DECK ECHO

```

ID THESIS, WIN33
SOL 24
TIME 30
$ BEGINNING OF RF ALTER 24$74
$ GENERATE SEQGP BULK DATA CARDS FOR EFFICIENCY IN SYMMETRIC DECOMP.
$ THE FOLLOWING ARE USER INPUT PARAMETERS
$ VALUE OPTION
$ SEQOUT--OUTPUT OPTIONS FOR SEQGP CARDS
$ 0 DEFAULT-NO PRINTED OR PUNCH OUTPUT
$ 1 PRINT TABLE OF INTERNAL/EXTERNAL SEQUENCE IN INTERNAL ORDER
$ 2 TRANSMIT THE SEQGP CARDS TO THE SYSTEM PUNCH FILE
$ 3 PRINT TABLE AND PUNCH SEQGP CARDS
$ NEWSEQ--OPTIONS FOR SEQUENCING LOGIC
$ -1 DO NOT RESEQUENCE
$ 1 USE ACTIVE COLUMN SEQUENCING OPTION
$ 2 USE BAND SEQUENCING OPTION
$ 3 DEFAULT-RUN BOTH ACTIVE COLUMN AND BAND SEQUENCING--SAVE THE SEQU ENCE
$ WITH THE LOWEST TIME ESTIMATE FOR DECOMPOSITION
$ SUPER--OPTIONS FOR TYPES OF SEQUENCING
$ 0 DEFAULT-USE PASSIVE COLUMN SEQUENCING OPTION
$ -1 USE SUPERELEMENT SEQUENCING OPTION
$ FACTOR--USED FOR THE GENERATION OF THE INTERNAL SEQUENCE NUMBER
$ SEQID = FACTOR * SEID + SEQ NUMBER
$ DEFAULT = 10000
$ MPCX--OPTION FOR MPC PROCESSING
$ -1 DO NOT PROCESS MPC BULK DATA CARDS OR RIGID ELEMENTS
$ 0 DEFAULT-PROCESS RIGID ELEMENTS ONLY
$ M POSITIVE INTEGER IS THE NUMBER OF THE MPC SET TO PROCESS
$ ALONG WITH ANY RIGID ELEMENTS PRESENT
$ START--STARTING POINT OPTIONS
$ 0 DEFAULT-PROGRAM SELECTS STARTING POINT
$ M INTEGER IS NUMBER OF POINTS TO BE USED TO START SEQUENCING
ALTER 8
COND NOSEQP,NEWSEQ $
SEQP GEOM1,GEOM2,GEOM4,/GEOM1Q,MATPARM/C,Y,SEQOUT=0/V,Y,NEWSEQ=+3//
C,Y,SUPER= 0/C,Y,FACTOR=10000/C,Y,MPCX=0/C,Y,START=0 $
EQUIV GEOM1Q,GEOM1/ALWAYS $
LABEL NOSEQP
$ END OF RF ALTER 24$74
CEND

```

CASE CONTROL DECK ECHO

CARD
COUNT

```

1 TITLE=DOUBLE-TEE BEAM (MPC)
2 SUBTITLE=SUBJECTED TO UNSYMETRIC UNIFORM LOAD.
3 DISPLACEMENT=ALL
4 ELFORCE=ALL
5 LOAD=100
6 MPC=3
7 $PC=13
8 BEGIN BULK

```

INPUT BULK DATA CARD COUNT = 1082

CARD COUNT	1	2	3	4	5	6	7	8	9	10
101-	CBEAH	101	19	102	103	104	105	106	107	108
102-	CBEAH	102	19	103	104	105	106	107	108	109
103-	CBEAH	103	19	104	105	106	107	108	109	110
104-	CBEAH	104	19	105	106	107	108	109	110	111
105-	CBEAH	105	19	106	107	108	109	110	111	112
106-	CBEAH	106	19	107	108	109	110	111	112	113
107-	CBEAH	107	19	108	109	110	111	112	113	114
108-	CBEAH	108	19	109	110	111	112	113	114	115
109-	CBEAH	109	19	110	111	112	113	114	115	116
110-	CBEAH	110	19	111	112	113	114	115	116	117
111-	CBEAH	111	19	112	113	114	115	116	117	118
112-	CBEAH	112	19	113	114	115	116	117	118	119
113-	CBEAH	113	19	114	115	116	117	118	119	120
114-	CBEAH	114	19	115	116	117	118	119	120	121
115-	CBEAH	115	19	116	117	118	119	120	121	122
116-	CBEAH	116	19	117	118	119	120	121	122	123
117-	CBEAH	117	19	118	119	120	121	122	123	124
118-	CBEAH	118	19	119	120	121	122	123	124	125
119-	CBEAH	119	19	120	121	122	123	124	125	126
120-	CBEAH	120	19	121	122	123	124	125	126	127
121-	CBEAH	121	19	122	123	124	125	126	127	128
122-	CBEAH	122	19	123	124	125	126	127	128	129
123-	CBEAH	123	19	124	125	126	127	128	129	130
124-	CBEAH	124	19	125	126	127	128	129	130	131
125-	CBEAH	125	19	126	127	128	129	130	131	132
126-	CBEAH	126	19	127	128	129	130	131	132	133
127-	CBEAH	127	19	128	129	130	131	132	133	134
128-	CBEAH	128	19	129	130	131	132	133	134	135
129-	CBEAH	129	19	130	131	132	133	134	135	136
130-	CBEAH	130	19	131	132	133	134	135	136	137
131-	CBEAH	131	19	132	133	134	135	136	137	138
132-	CBEAH	132	19	133	134	135	136	137	138	139
133-	CBEAH	133	19	134	135	136	137	138	139	140
134-	CBEAH	134	19	135	136	137	138	139	140	141
135-	CBEAH	135	19	136	137	138	139	140	141	142
136-	CBEAH	136	19	137	138	139	140	141	142	143
137-	CBEAH	137	19	138	139	140	141	142	143	144
138-	CBEAH	138	19	139	140	141	142	143	144	145
139-	CBEAH	139	19	140	141	142	143	144	145	146
140-	CBEAH	140	19	141	142	143	144	145	146	147
141-	CBEAH	141	19	142	143	144	145	146	147	148
142-	CBEAH	142	19	143	144	145	146	147	148	149
143-	CBEAH	143	19	144	145	146	147	148	149	150
144-	CBEAH	144	19	145	146	147	148	149	150	151
145-	CBEAH	145	19	146	147	148	149	150	151	152
146-	CBEAH	146	19	147	148	149	150	151	152	153
147-	CBEAH	147	19	148	149	150	151	152	153	154
148-	CBEAH	148	19	149	150	151	152	153	154	155
149-	CBEAH	149	19	150	151	152	153	154	155	156
150-	CBEAH	150	19	151	152	153	154	155	156	157
151-	CBEAH	151	19	152	153	154	155	156	157	158
152-	CBEAH	152	19	153	154	155	156	157	158	159
153-	CBEAH	153	19	154	155	156	157	158	159	160
154-	CBEAH	154	19	155	156	157	158	159	160	161
155-	CBEAH	155	19	156	157	158	159	160	161	162
156-	CBEAH	156	19	157	158	159	160	161	162	163
157-	CBEAH	157	19	158	159	160	161	162	163	164
158-	CBEAH	158	19	159	160	161	162	163	164	165
159-	CBEAH	159	19	160	161	162	163	164	165	166
160-	CBEAH	160	19	161	162	163	164	165	166	167
161-	CBEAH	161	19	162	163	164	165	166	167	168
162-	CBEAH	162	19	163	164	165	166	167	168	169
163-	CBEAH	163	19	164	165	166	167	168	169	170
164-	CBEAH	164	19	165	166	167	168	169	170	171
165-	CBEAH	165	19	166	167	168	169	170	171	172
166-	CBEAH	166	19	167	168	169	170	171	172	173
167-	CBEAH	167	19	168	169	170	171	172	173	174
168-	CBEAH	168	19	169	170	171	172	173	174	175
169-	CBEAH	169	19	170	171	172	173	174	175	176
170-	CBEAH	170	19	171	172	173	174	175	176	177
171-	CBEAH	171	19	172	173	174	175	176	177	178
172-	CBEAH	172	19	173	174	175	176	177	178	179
173-	CBEAH	173	19	174	175	176	177	178	179	180
174-	CBEAH	174	19	175	176	177	178	179	180	181
175-	CBEAH	175	19	176	177	178	179	180	181	182
176-	CBEAH	176	19	177	178	179	180	181	182	183
177-	CBEAH	177	19	178	179	180	181	182	183	0.
178-	CBEAH	178	19	179	180	181	182	183	0.	312.5
179-	CBEAH	179	19	180	181	182	183	0.	12356	0.
180-	CBEAH	180	19	181	182	183	0.	0.	0.	0.
181-	GRID	1	0.	0.	200.	312.5	5	0.	0.	0.
182-	GRID	2	0.	0.	400.	312.5	5	0.	0.	0.
183-	GRID	3	0.	0.	600.	312.5	5	0.	0.	0.
184-	GRID	4	0.	0.	800.	312.5	5	0.	0.	0.
185-	GRID	5	0.	0.	1000.	312.5	5	0.	0.	0.
186-	GRID	6	0.	0.	1200.	312.5	5	0.	0.	0.
187-	GRID	7	0.	0.	1400.	312.5	5	0.	0.	0.
188-	GRID	8	0.	0.	1600.	312.5	5	0.	0.	0.
189-	GRID	9	0.	0.	1800.	312.5	5	0.	0.	0.
190-	GRID	10	0.	0.	2000.	312.5	5	0.	0.	0.
191-	GRID	11	0.	0.	2200.	312.5	5	0.	0.	0.
192-	GRID	12	0.	0.	2400.	312.5	5	0.	0.	0.
193-	GRID	13	0.	0.	2600.	312.5	5	0.	0.	0.
194-	GRID	14	0.	0.	2800.	312.5	5	0.	0.	0.
195-	GRID	15	0.	0.	3000.	312.5	5	0.	0.	0.
196-	GRID	16	0.	0.	3200.	312.5	5	0.	0.	0.
197-	GRID	17	0.	0.	3400.	312.5	5	0.	0.	0.
198-	GRID	18	0.	0.	3600.	312.5	5	0.	0.	0.
199-	GRID	19	0.	0.	3800.	312.5	5	0.	0.	0.
200-	GRID	20	0.	0.	0.	312.5	5	0.	0.	0.

CARD COUNT		1	2	..	3	4	5	6	7	8	9	10
201	GRID	30	0.			4000.						
202	GRID	31	0.			4200.						
203	GRID	32	0.			4400.						
204	GRID	33	0.			4600.						
205	GRID	34	0.			4800.						
206	GRID	35	0.			5000.						
207	GRID	36	0.			5200.						
208	GRID	37	0.			5400.						
209	GRID	38	0.			5600.						
210	GRID	39	0.			5800.						
211	GRID	40	0.			6000.						
212	GRID	41	0.			6200.						
213	GRID	42	0.			6400.						
214	GRID	43	0.			6600.						
215	GRID	44	0.			6800.						
216	GRID	45	0.			7000.						
217	GRID	46	0.			7200.						
218	GRID	47	0.			7400.						
219	GRID	48	0.			7600.						
220	GRID	49	0.			7800.						
221	GRID	50	0.			8000.						
222	GRID	51	0.			8200.						
223	GRID	52	0.			8400.						
224	GRID	53	0.			8600.						
225	GRID	54	0.			8800.						
226	GRID	55	0.			9000.						
227	GRID	56	0.			9200.				12356		
228	GRID	57	0.			9400.						
229	GRID	58	0.			9600.						
230	GRID	59	0.			9800.						
231	GRID	60	0.			10000.						
232	GRID	61	0.			10200.						
233	GRID	62	0.			10400.						
234	GRID	63	0.			10600.						
235	GRID	64	0.			10800.						
236	GRID	65	0.			11000.						
237	GRID	66	0.			11200.						
238	GRID	67	0.			11400.						
239	GRID	68	0.			11600.						
240	GRID	69	0.			11800.						
241	GRID	70	0.			12000.				12356		
242	GRID	71	600.			0.				12356		
243	GRID	72	600.			200.						
244	GRID	73	600.			400.						
245	GRID	74	600.			600.						
246	GRID	75	600.			800.						
247	GRID	76	600.			1000.						
248	GRID	77	600.			1200.						
249	GRID	78	600.			1400.						
250	GRID	79	600.			1600.						
251	GRID	80	600.			1800.						
252	GRID	81	600.			2000.						
253	GRID	82	600.			2200.						
254	GRID	83	600.			2400.						
255	GRID	84	600.			2600.						
256	GRID	85	600.			2800.						
257	GRID	86	600.			3000.				12356		
258	GRID	87	600.			3200.						
259	GRID	88	600.			3400.						
260	GRID	89	600.			3600.						
261	GRID	90	600.			3800.						
262	GRID	91	600.			4000.						
263	GRID	92	600.			4200.						
264	GRID	93	600.			4400.						
265	GRID	94	600.			4600.						
266	GRID	95	600.			4800.						
267	GRID	96	600.			5000.						
268	GRID	97	600.			5200.						
269	GRID	98	600.			5400.						
270	GRID	99	600.			5600.						
271	GRID	100	600.			5800.						
272	GRID	101	600.			6000.						
273	GRID	102	600.			6200.						
274	GRID	103	600.			6400.						
275	GRID	104	600.			6600.						
276	GRID	105	600.			6800.						
277	GRID	106	600.			7000.						
278	GRID	107	600.			7200.						
279	GRID	108	600.			7400.						
280	GRID	109	600.			7600.						
281	GRID	110	600.			7800.						
282	GRID	111	600.			8000.						
283	GRID	112	600.			8200.						
284	GRID	113	600.			8400.						
285	GRID	114	600.			8600.						
286	GRID	115	600.			8800.						
287	GRID	116	600.			9000.				12356		
288	GRID	117	600.			9200.						
289	GRID	118	600.			9400.						
290	GRID	119	600.			9600.						
291	GRID	120	600.			9800.						
292	GRID	121	600.			10000.						
293	GRID	122	600.			10200.						
294	GRID	123	600.			10400.						
295	GRID	124	600.			10600.						
296	GRID	125	600.			10800.						
297	GRID	126	600.			11000.						
298	GRID	127	600.			11200.						
299	GRID	128	600.			11400.						
300	GRID	129	600.			11600.						

CARD COUNT	1	2	3	4	5	6	7	8	9	10
301	GRID	121		600.	11800.	0.				
302	GRID	122		600.	12000.	0.				
303	GRID	123		600.	0.	0.		12356		
304	GRID	124		600.	200.	0.		12356		
305	GRID	125		600.	400.	0.				
306	GRID	126		600.	600.	0.				
307	GRID	127		600.	800.	0.				
308	GRID	128		600.	1000.	0.				
309	GRID	129		600.	1200.	0.				
310	GRID	130		600.	1400.	0.				
311	GRID	131		600.	1600.	0.				
312	GRID	132		600.	1800.	0.				
313	GRID	133		600.	2000.	0.				
314	GRID	134		600.	2200.	0.				
315	GRID	135		600.	2400.	0.				
316	GRID	136		600.	2600.	0.				
317	GRID	137		600.	2800.	0.				
318	GRID	138		600.	3000.	0.		12356		
319	GRID	139		600.	3200.	0.				
320	GRID	140		600.	3400.	0.				
321	GRID	141		600.	3600.	0.				
322	GRID	142		600.	3800.	0.				
323	GRID	143		600.	4000.	0.				
324	GRID	144		600.	4200.	0.				
325	GRID	145		600.	4400.	0.				
326	GRID	146		600.	4600.	0.				
327	GRID	147		600.	4800.	0.				
328	GRID	148		600.	5000.	0.				
329	GRID	149		600.	5200.	0.				
330	GRID	150		600.	5400.	0.				
331	GRID	151		600.	5600.	0.				
332	GRID	152		600.	5800.	0.				
333	GRID	153		600.	6000.	0.				
334	GRID	154		600.	6200.	0.				
335	GRID	155		600.	6400.	0.				
336	GRID	156		600.	6600.	0.				
337	GRID	157		600.	6800.	0.				
338	GRID	158		600.	7000.	0.				
339	GRID	159		600.	7200.	0.				
340	GRID	160		600.	7400.	0.				
341	GRID	161		600.	7600.	0.				
342	GRID	162		600.	7800.	0.				
343	GRID	163		600.	8000.	0.				
344	GRID	164		600.	8200.	0.				
345	GRID	165		600.	8400.	0.				
346	GRID	166		600.	8600.	0.				
347	GRID	167		600.	8800.	0.		12356		
348	GRID	168		600.	9000.	0.				
349	GRID	169		600.	9200.	0.				
350	GRID	170		600.	9400.	0.				
351	GRID	171		600.	9600.	0.				
352	GRID	172		600.	9800.	0.				
353	GRID	173		600.	10000.	0.				
354	GRID	174		600.	10200.	0.				
355	GRID	175		600.	10400.	0.				
356	GRID	176		600.	10600.	0.				
357	GRID	177		600.	10800.	0.				
358	GRID	178		600.	11000.	0.				
359	GRID	179		600.	11200.	0.				
360	GRID	180		600.	11400.	0.				
361	GRID	181		600.	11600.	0.				
362	GRID	182		600.	11800.	0.				
363	GRID	183		600.	12000.	0.		12356		
364	GRID	184		600.		0.				
365	GRID	185		600.		0.				
366	GRID	186		600.		0.				
367	GRID	187		600.		0.				
368	GRID	188		600.		0.				
369	GRID	189		600.		0.				
370	GRID	190		600.		0.				
371	GRID	191		600.		0.				
372	GRID	192		600.		0.				
373	GRID	193		600.		0.				
374	GRID	194		600.		0.				
375	GRID	195		600.		0.				
376	GRID	196		600.		0.				
377	GRID	197		600.		0.				
378	GRID	198		600.		0.				
379	GRID	199		600.		0.				
380	GRID	200		600.		0.				
381	GRID	201		600.		0.				
382	GRID	202		600.		0.				
383	GRID	203		600.		0.				
384	GRID	204		600.		0.				
385	GRID	205		600.		0.				
386	GRID	206		600.		0.				
387	GRID	207		600.		0.				
388	GRID	208		600.		0.				
389	GRID	209		600.		0.				
390	GRID	210		600.		0.				
391	GRID	211		600.		0.				
392	GRID	212		600.		0.				
393	GRID	213		600.		0.				
394	GRID	214		600.		0.				
395	GRID	215		600.		0.				
396	GRID	216		600.		0.				
397	GRID	217		600.		0.				
398	GRID	218		600.		0.				
399	GRID	219		600.		0.				
400	GRID	220		600.		0.				

CARD	1	2	3	4	5	6	7	8	9	10
401	H	.	.	.	.	70	.	.	.	.
402	H	.	.	.	.	70	.	.	.	.
403	H	.	.	.	.	70	.	.	.	.
404	H	.	.	.	.	71	.	.	.	.
405	H	.	.	.	.	71	.	.	.	.
406	H	.	.	.	.	71	.	.	.	.
407	H	.	.	.	.	71	.	.	.	.
408	H	.	.	.	.	71	.	.	.	.
409	H	.	.	.	.	72	.	.	.	.
410	H	.	.	.	.	72	.	.	.	.
411	H	.	.	.	.	72	.	.	.	.
412	H	.	.	.	.	72	.	.	.	.
413	H	.	.	.	.	72	.	.	.	.
414	H	.	.	.	.	73	.	.	.	.
415	H	.	.	.	.	73	.	.	.	.
416	H	.	.	.	.	73	.	.	.	.
417	H	.	.	.	.	73	.	.	.	.
418	H	.	.	.	.	73	.	.	.	.
419	H	.	.	.	.	74	.	.	.	.
420	H	.	.	.	.	74	.	.	.	.
421	H	.	.	.	.	74	.	.	.	.
422	H	.	.	.	.	74	.	.	.	.
423	H	.	.	.	.	74	.	.	.	.
424	H	.	.	.	.	75	.	.	.	.
425	H	.	.	.	.	75	.	.	.	.
426	H	.	.	.	.	75	.	.	.	.
427	H	.	.	.	.	75	.	.	.	.
428	H	.	.	.	.	75	.	.	.	.
429	H	.	.	.	.	75	.	.	.	.
430	H	.	.	.	.	76	.	.	.	.
431	H	.	.	.	.	76	.	.	.	.
432	H	.	.	.	.	76	.	.	.	.
433	H	.	.	.	.	76	.	.	.	.
434	H	.	.	.	.	76	.	.	.	.
435	H	.	.	.	.	78	.	.	.	.
436	H	.	.	.	.	78	.	.	.	.
437	H	.	.	.	.	78	.	.	.	.
438	H	.	.	.	.	78	.	.	.	.
439	H	.	.	.	.	78	.	.	.	.
440	H	.	.	.	.	79	.	.	.	.
441	H	.	.	.	.	79	.	.	.	.
442	H	.	.	.	.	79	.	.	.	.
443	H	.	.	.	.	79	.	.	.	.
444	H	.	.	.	.	80	.	.	.	.
445	H	.	.	.	.	80	.	.	.	.
446	H	.	.	.	.	80	.	.	.	.
447	H	.	.	.	.	80	.	.	.	.
448	H	.	.	.	.	80	.	.	.	.
449	H	.	.	.	.	80	.	.	.	.
450	H	.	.	.	.	81	.	.	.	.
451	H	.	.	.	.	81	.	.	.	.
452	H	.	.	.	.	81	.	.	.	.
453	H	.	.	.	.	81	.	.	.	.
454	H	.	.	.	.	81	.	.	.	.
455	H	.	.	.	.	82	.	.	.	.
456	H	.	.	.	.	82	.	.	.	.
457	H	.	.	.	.	82	.	.	.	.
458	H	.	.	.	.	82	.	.	.	.
459	H	.	.	.	.	83	.	.	.	.
460	H	.	.	.	.	83	.	.	.	.
461	H	.	.	.	.	83	.	.	.	.
462	H	.	.	.	.	83	.	.	.	.
463	H	.	.	.	.	83	.	.	.	.
464	H	.	.	.	.	84	.	.	.	.
465	H	.	.	.	.	84	.	.	.	.
466	H	.	.	.	.	84	.	.	.	.
467	H	.	.	.	.	84	.	.	.	.
468	H	.	.	.	.	84	.	.	.	.
469	H	.	.	.	.	85	.	.	.	.
470	H	.	.	.	.	85	.	.	.	.
471	H	.	.	.	.	85	.	.	.	.
472	H	.	.	.	.	85	.	.	.	.
473	H	.	.	.	.	85	.	.	.	.
474	H	.	.	.	.	86	.	.	.	.
475	H	.	.	.	.	86	.	.	.	.
476	H	.	.	.	.	86	.	.	.	.
477	H	.	.	.	.	86	.	.	.	.
478	H	.	.	.	.	86	.	.	.	.
479	H	.	.	.	.	87	.	.	.	.
480	H	.	.	.	.	87	.	.	.	.
481	H	.	.	.	.	87	.	.	.	.
482	H	.	.	.	.	87	.	.	.	.
483	H	.	.	.	.	87	.	.	.	.
484	H	.	.	.	.	88	.	.	.	.
485	H	.	.	.	.	88	.	.	.	.
486	H	.	.	.	.	88	.	.	.	.
487	H	.	.	.	.	88	.	.	.	.
488	H	.	.	.	.	88	.	.	.	.
489	H	.	.	.	.	88	.	.	.	.
490	H	.	.	.	.	89	.	.	.	.
491	H	.	.	.	.	89	.	.	.	.
492	H	.	.	.	.	89	.	.	.	.
493	H	.	.	.	.	89	.	.	.	.
494	H	.	.	.	.	90	.	.	.	.
495	H	.	.	.	.	90	.	.	.	.
496	H	.	.	.	.	90	.	.	.	.
497	H	.	.	.	.	90	.	.	.	.
498	H	.	.	.	.	90	.	.	.	.
499	H	.	.	.	.	90	.	.	.	.
500	H	.	.	.	.	91	.	.	.	.

CARD	1	2	3	4	5	6	7	8	9	10
COUNT										
701	HPC		71	4	1	32				
702	HPC		71	5	1	32				
703	HPC		71	6	1	32				
704	HPC		72	1	1	33				
705	HPC		72	2	1	33				
706	HPC		72	3	1	33				
707	HPC		72	4	1	33				
708	HPC		72	5	1	33				
709	HPC		72	6	1	33				
710	HPC		73	1	1	34				
711	HPC		73	2	1	34				
712	HPC		73	3	1	34				
713	HPC		73	4	1	34				
714	HPC		73	5	1	34				
715	HPC		74	1	1	35				
716	HPC		74	2	1	35				
717	HPC		74	3	1	35				
718	HPC		74	4	1	35				
719	HPC		74	5	1	35				
720	HPC		74	6	1	35				
721	HPC		75	1	1	36				
722	HPC		75	2	1	36				
723	HPC		75	3	1	36				
724	HPC		75	4	1	36				
725	HPC		75	5	1	36				
726	HPC		75	6	1	36				
727	HPC		75	7	1	36				
728	HPC		76	1	1	37				
729	HPC		76	2	1	37				
730	HPC		76	3	1	37				
731	HPC		76	4	1	37				
732	HPC		76	5	1	37				
733	HPC		76	6	1	37				
734	HPC		78	1	1	39				
735	HPC		78	2	1	39				
736	HPC		78	3	1	39				
737	HPC		78	4	1	39				
738	HPC		78	5	1	39				
739	HPC		78	6	1	39				
740	HPC		79	1	1	40				
741	HPC		79	2	1	40				
742	HPC		79	3	1	40				
743	HPC		79	4	1	40				
744	HPC		79	5	1	40				
745	HPC		79	6	1	40				
746	HPC		80	1	1	41				
747	HPC		80	2	1	41				
748	HPC		80	3	1	41				
749	HPC		80	4	1	41				
750	HPC		80	5	1	41				
751	HPC		80	6	1	41				
752	HPC		81	1	1	42				
753	HPC		81	2	1	42				
754	HPC		81	3	1	42				
755	HPC		81	4	1	42				
756	HPC		81	5	1	42				
757	HPC		81	6	1	42				
758	HPC		82	1	1	43				
759	HPC		82	2	1	43				
760	HPC		82	3	1	43				
761	HPC		82	4	1	43				
762	HPC		82	5	1	43				
763	HPC		82	6	1	43				
764	HPC		83	1	1	44				
765	HPC		83	2	1	44				
766	HPC		83	3	1	44				
767	HPC		83	4	1	44				
768	HPC		83	5	1	44				
769	HPC		83	6	1	44				
770	HPC		84	1	1	45				
771	HPC		84	2	1	45				
772	HPC		84	3	1	45				
773	HPC		84	4	1	45				
774	HPC		84	5	1	45				
775	HPC		84	6	1	45				
776	HPC		85	1	1	46				
777	HPC		85	2	1	46				
778	HPC		85	3	1	46				
779	HPC		85	4	1	46				
780	HPC		85	5	1	46				
781	HPC		85	6	1	46				
782	HPC		86	1	1	47				
783	HPC		86	2	1	47				
784	HPC		86	3	1	47				
785	HPC		86	4	1	47				
786	HPC		86	5	1	47				
787	HPC		86	6	1	47				
788	HPC		87	1	1	48				
789	HPC		87	2	1	48				
790	HPC		87	3	1	48				
791	HPC		87	4	1	48				
792	HPC		87	5	1	48				
793	HPC		87	6	1	48				
794	HPC		88	1	1	49				
795	HPC		88	2	1	49				
796	HPC		88	3	1	49				
797	HPC		88	4	1	49				
798	HPC		88	5	1	49				
799	HPC		88	6	1	49				
800	HPC		89	1	1	50				

SORTED BULK DATA ECHO

CARD	COUNT	1	2	3	4	5	6	7	8	9	10
801	1	HPC	.	89	.	.	.	.	.	.	.
802	1	HPC	.	89	.	.	.	.	.	.	.
803	1	HPC	.	89	.	.	.	.	.	.	.
804	1	HPC	.	89	.	.	.	.	.	.	.
805	1	HPC	.	89	.	.	.	.	.	.	.
806	1	HPC	.	90	.	.	.	.	.	.	.
807	1	HPC	.	90	.	.	.	.	.	.	.
808	1	HPC	.	90	.	.	.	.	.	.	.
809	1	HPC	.	90	.	.	.	.	.	.	.
810	1	HPC	.	90	.	.	.	.	.	.	.
811	1	HPC	.	90	.	.	.	.	.	.	.
812	1	HPC	.	91	.	.	.	.	.	.	.
813	1	HPC	.	91	.	.	.	.	.	.	.
814	1	HPC	.	91	.	.	.	.	.	.	.
815	1	HPC	.	91	.	.	.	.	.	.	.
816	1	HPC	.	91	.	.	.	.	.	.	.
817	1	HPC	.	91	.	.	.	.	.	.	.
818	1	HPC	.	91	.	.	.	.	.	.	.
819	1	HPC	.	92	.	.	.	.	.	.	.
820	1	HPC	.	92	.	.	.	.	.	.	.
821	1	HPC	.	92	.	.	.	.	.	.	.
822	1	HPC	.	92	.	.	.	.	.	.	.
823	1	HPC	.	92	.	.	.	.	.	.	.
824	1	HPC	.	93	.	.	.	.	.	.	.
825	1	HPC	.	93	.	.	.	.	.	.	.
826	1	HPC	.	93	.	.	.	.	.	.	.
827	1	HPC	.	93	.	.	.	.	.	.	.
828	1	HPC	.	93	.	.	.	.	.	.	.
829	1	HPC	.	93	.	.	.	.	.	.	.
830	1	HPC	.	94	.	.	.	.	.	.	.
831	1	HPC	.	94	.	.	.	.	.	.	.
832	1	HPC	.	94	.	.	.	.	.	.	.
833	1	HPC	.	94	.	.	.	.	.	.	.
834	1	HPC	.	94	.	.	.	.	.	.	.
835	1	HPC	.	95	.	.	.	.	.	.	.
836	1	HPC	.	95	.	.	.	.	.	.	.
837	1	HPC	.	95	.	.	.	.	.	.	.
838	1	HPC	.	95	.	.	.	.	.	.	.
839	1	HPC	.	95	.	.	.	.	.	.	.
840	1	HPC	.	95	.	.	.	.	.	.	.
841	1	HPC	.	95	.	.	.	.	.	.	.
842	1	HPC	.	96	.	.	.	.	.	.	.
843	1	HPC	.	96	.	.	.	.	.	.	.
844	1	HPC	.	96	.	.	.	.	.	.	.
845	1	HPC	.	96	.	.	.	.	.	.	.
846	1	HPC	.	96	.	.	.	.	.	.	.
847	1	HPC	.	96	.	.	.	.	.	.	.
848	1	HPC	.	97	.	.	.	.	.	.	.
849	1	HPC	.	97	.	.	.	.	.	.	.
850	1	HPC	.	97	.	.	.	.	.	.	.
851	1	HPC	.	97	.	.	.	.	.	.	.
852	1	HPC	.	97	.	.	.	.	.	.	.
853	1	HPC	.	97	.	.	.	.	.	.	.
854	1	HPC	.	98	.	.	.	.	.	.	.
855	1	HPC	.	98	.	.	.	.	.	.	.
856	1	HPC	.	98	.	.	.	.	.	.	.
857	1	HPC	.	98	.	.	.	.	.	.	.
858	1	HPC	.	98	.	.	.	.	.	.	.
859	1	HPC	.	98	.	.	.	.	.	.	.
860	1	HPC	.	99	.	.	.	.	.	.	.
861	1	HPC	.	99	.	.	.	.	.	.	.
862	1	HPC	.	99	.	.	.	.	.	.	.
863	1	HPC	.	99	.	.	.	.	.	.	.
864	1	HPC	.	99	.	.	.	.	.	.	.
865	1	HPC	.	99	.	.	.	.	.	.	.
866	1	HPC	.	100	.	.	.	.	.	.	.
867	1	HPC	.	100	.	.	.	.	.	.	.
868	1	HPC	.	100	.	.	.	.	.	.	.
869	1	HPC	.	100	.	.	.	.	.	.	.
870	1	HPC	.	100	.	.	.	.	.	.	.
871	1	HPC	.	100	.	.	.	.	.	.	.
872	1	HPC	.	101	.	.	.	.	.	.	.
873	1	HPC	.	101	.	.	.	.	.	.	.
874	1	HPC	.	101	.	.	.	.	.	.	.
875	1	HPC	.	101	.	.	.	.	.	.	.
876	1	HPC	.	101	.	.	.	.	.	.	.
877	1	HPC	.	101	.	.	.	.	.	.	.
878	1	HPC	.	102	.	.	.	.	.	.	.
879	1	HPC	.	102	.	.	.	.	.	.	.
880	1	HPC	.	102	.	.	.	.	.	.	.
881	1	HPC	.	102	.	.	.	.	.	.	.
882	1	HPC	.	102	.	.	.	.	.	.	.
883	1	HPC	.	102	.	.	.	.	.	.	.
884	1	HPC	.	103	.	.	.	.	.	.	.
885	1	HPC	.	103	.	.	.	.	.	.	.
886	1	HPC	.	103	.	.	.	.	.	.	.
887	1	HPC	.	103	.	.	.	.	.	.	.
888	1	HPC	.	103	.	.	.	.	.	.	.
889	1	HPC	.	103	.	.	.	.	.	.	.
890	1	HPC	.	104	.	.	.	.	.	.	.
891	1	HPC	.	104	.	.	.	.	.	.	.
892	1	HPC	.	104	.	.	.	.	.	.	.
893	1	HPC	.	104	.	.	.	.	.	.	.
894	1	HPC	.	104	.	.	.	.	.	.	.
895	1	HPC	.	104	.	.	.	.	.	.	.
896	1	HPC	.	105	.	.	.	.	.	.	.
897	1	HPC	.	105	.	.	.	.	.	.	.
898	1	HPC	.	105	.	.	.	.	.	.	.
899	1	HPC	.	105	.	.	.	.	.	.	.
900	1	HPC	.	105	.	.	.	.	.	.	.

S O R T E D B U L K D A T A E C H O

CARD	1	2	3	4	5	6	7	8	9	10
COU										
901-	HPC		105	6		166	6			
902-	HPC		106			167				
903-	HPC		106	2		167				
904-	HPC		106	3		167	2			
905-	HPC		106	4		167	3			
906-	HPC		106	5		167	4			
907-	HPC		106	6		167	5			
908-	HPC		108	1		169	6			
909-	HPC		108	2		169	1			
910-	HPC		108	3		169	2			
911-	HPC		108	4		169	3			
912-	HPC		108	5		169	4			
913-	HPC		108	6		169	5			
914-	HPC		109	1		170	6			
915-	HPC		109	2		170	1			
916-	HPC		109	3		170	2			
917-	HPC		109	4		170	3			
918-	HPC		109	5		170	4			
919-	HPC		109	6		170	5			
920-	HPC		110	1		171	6			
921-	HPC		110	2		171	1			
922-	HPC		110	3		171	2			
923-	HPC		110	4		171	3			
924-	HPC		110	5		171	4			
925-	HPC		110	6		171	5			
926-	HPC		111	1		172	6			
927-	HPC		111	2		172	1			
928-	HPC		111	3		172	2			
929-	HPC		111	4		172	3			
930-	HPC		111	5		172	4			
931-	HPC		111	6		172	5			
932-	HPC		112	1		173	6			
933-	HPC		112	2		173	1			
934-	HPC		112	3		173	2			
935-	HPC		112	4		173	3			
936-	HPC		112	5		173	4			
937-	HPC		112	6		173	5			
938-	HPC		113	1		174	6			
939-	HPC		113	2		174	1			
940-	HPC		113	3		174	2			
941-	HPC		113	4		174	3			
942-	HPC		113	5		174	4			
943-	HPC		113	6		174	5			
944-	HPC		114	1		175	6			
945-	HPC		114	2		175	1			
946-	HPC		114	3		175	2			
947-	HPC		114	4		175	3			
948-	HPC		114	5		175	4			
949-	HPC		114	6		175	5			
950-	HPC		115	1		176	6			
951-	HPC		115	2		176	1			
952-	HPC		115	3		176	2			
953-	HPC		115	4		176	3			
954-	HPC		115	5		176	4			
955-	HPC		115	6		176	5			
956-	HPC		116	1		177	6			
957-	HPC		116	2		177	1			
958-	HPC		116	3		177	2			
959-	HPC		116	4		177	3			
960-	HPC		116	5		177	4			
961-	HPC		116	6		177	5			
962-	HPC		117	1		178	6			
963-	HPC		117	2		178	1			
964-	HPC		117	3		178	2			
965-	HPC		117	4		178	3			
966-	HPC		117	5		178	4			
967-	HPC		117	6		178	5			
968-	HPC		118	1		179	6			
969-	HPC		118	2		179	1			
970-	HPC		118	3		179	2			
971-	HPC		118	4		179	3			
972-	HPC		118	5		179	4			
973-	HPC		118	6		179	5			
974-	HPC		119	1		180	6			
975-	HPC		119	2		180	1			
976-	HPC		119	3		180	2			
977-	HPC		119	4		180	3			
978-	HPC		119	5		180	4			
979-	HPC		119	6		180	5			
980-	HPC		120	1		181	6			
981-	HPC		120	2		181	1			
982-	HPC		120	3		181	2			
983-	HPC		120	4		181	3			
984-	HPC		120	5		181	4			
985-	HPC		120	6		181	5			
986-	HPC		121	1		182	6			
987-	HPC		121	2		182	1			
988-	HPC		121	3		182	2			
989-	HPC		121	4		182	3			
990-	HPC		121	5		182	4			
991-	HPC		121	6		182	5			
992-	PBEAH	9	29	120000.	5.76E+10	2.50E+07	1	0+8		
993-	PBEAH	19	29	28750.	5.99E+6	7.92E+8	2	3958+7		
994-	PLOAOI	100	16	FZ	LE	0.	-1200.	200.	-1200.	
995-	PLOAD1	100	17	FZ	LE	0.	-1200.	200.	-1200.	
996-	PLOAOI	100	18	FZ	LE	0.	-1200.	200.	-1200.	
997-	PLOAD1	100	19	FZ	LE	0.	-1200.	200.	-1200.	
998-	PLOAOI	100	20	FZ	LE	0.	-1200.	200.	-1200.	
999-	PLOAOI	100	21	FZ	LE	0.	-1200.	200.	-1200.	
1000-	PLOAD1	100	22	FZ	LE	0.	-1200.	200.	-1200.	

CARD	S O R T E D B U L K D A T A E C H O									
COUNT	1	2	3	4	5	6	7	8	9	10
1001-	PLOAD1	100	23	FZ	LE	0.	-1200.	200.	-1200.	
1002-	PLOAD1	100	24	FZ	LE	0.	-1200.	200.	-1200.	
1003-	PLOAD1	100	25	FZ	LE	0.	-1200.	200.	-1200.	
1004-	PLOAD1	100	26	FZ	LE	0.	-1200.	200.	-1200.	
1005-	PLOAD1	100	27	FZ	LE	0.	-1200.	200.	-1200.	
1006-	PLOAD1	100	28	FZ	LE	0.	-1200.	200.	-1200.	
1007-	PLOAD1	100	29	FZ	LE	0.	-1200.	200.	-1200.	
1008-	PLOAD1	100	30	FZ	LE	0.	-1200.	200.	-1200.	
1009-	PLOAD1	100	31	FZ	LE	0.	-1200.	200.	-1200.	
1010-	PLOAD1	100	32	FZ	LE	0.	-1200.	200.	-1200.	
1011-	PLOAD1	100	33	FZ	LE	0.	-1200.	200.	-1200.	
1012-	PLOAD1	100	34	FZ	LE	0.	-1200.	200.	-1200.	
1013-	PLOAD1	100	35	FZ	LE	0.	-1200.	200.	-1200.	
1014-	PLOAD1	100	36	FZ	LE	0.	-1200.	200.	-1200.	
1015-	PLOAD1	100	37	FZ	LE	0.	-1200.	200.	-1200.	
1016-	PLOAD1	100	38	FZ	LE	0.	-1200.	200.	-1200.	
1017-	PLOAD1	100	39	FZ	LE	0.	-1200.	200.	-1200.	
1018-	PLOAD1	100	40	FZ	LE	0.	-1200.	200.	-1200.	
1019-	PLOAD1	100	41	FZ	LE	0.	-1200.	200.	-1200.	
1020-	PLOAD1	100	42	FZ	LE	0.	-1200.	200.	-1200.	
1021-	PLOAD1	100	43	FZ	LE	0.	-1200.	200.	-1200.	
1022-	PLOAD1	100	44	FZ	LE	0.	-1200.	200.	-1200.	
1023-	PLOAD1	100	45	FZ	LE	0.	-1200.	200.	-1200.	
	ENDDATA									

TOTAL COUNT= 1024

Input Load data for Doublt-Tee Beam Using Three-Plate Beam
Element Model Subjected to Unsymmetrical Load

994-	PLOAD1	100	16	FZ	LE	0.	-1200.	200.	-1200.
995-	PLOAD1	100	16	MY	LE	0.	72E+4	200.	72E+4
996-	PLOAD1	100	17	FZ	LE	0.	-1200.	200.	-1200.
997-	PLOAD1	100	17	MY	LE	0.	72E+4	200.	72E+4
998-	PLOAD1	100	18	FZ	LE	0.	-1200.	200.	-1200.
999-	PLOAD1	100	18	MY	LE	0.	72E+4	200.	72E+4
1000-	PLOAD1	100	19	FZ	LE	0.	-1200.	200.	-1200.
1001-	PLOAD1	100	19	MY	LE	0.	72E+4	200.	72E+4
1002-	PLOAD1	100	20	FZ	LE	0.	-1200.	200.	-1200.
1003-	PLOAD1	100	20	MY	LE	0.	72E+4	200.	72E+4
1004-	PLOAD1	100	21	FZ	LE	0.	-1200.	200.	-1200.
1005-	PLOAD1	100	21	MY	LE	0.	72E+4	200.	72E+4
1006-	PLOAD1	100	22	FZ	LE	0.	-1200.	200.	-1200.
1007-	PLOAD1	100	22	MY	LE	0.	72E+4	200.	72E+4
1008-	PLOAD1	100	23	FZ	LE	0.	-1200.	200.	-1200.
1009-	PLOAD1	100	23	MY	LE	0.	72E+4	200.	72E+4
1010-	PLOAD1	100	24	FZ	LE	0.	-1200.	200.	-1200.
1011-	PLOAD1	100	24	MY	LE	0.	72E+4	200.	72E+4
1012-	PLOAD1	100	25	FZ	LE	0.	-1200.	200.	-1200.
1013-	PLOAD1	100	25	MY	LE	0.	72E+4	200.	72E+4
1014-	PLOAD1	100	26	FZ	LE	0.	-1200.	200.	-1200.
1015-	PLOAD1	100	26	MY	LE	0.	72E+4	200.	72E+4
1016-	PLOAD1	100	27	FZ	LE	0.	-1200.	200.	-1200.
1017-	PLOAD1	100	27	MY	LE	0.	72E+4	200.	72E+4
1018-	PLOAD1	100	28	FZ	LE	0.	-1200.	200.	-1200.
1019-	PLOAD1	100	28	MY	LE	0.	72E+4	200.	72E+4
1020-	PLOAD1	100	29	FZ	LE	0.	-1200.	200.	-1200.
1021-	PLOAD1	100	29	MY	LE	0.	72E+4	200.	72E+4
1022-	PLOAD1	100	30	FZ	LE	0.	-1200.	200.	-1200.
1023-	PLOAD1	100	30	MY	LE	0.	72E+4	200.	72E+4
1024-	PLOAD1	100	31	FZ	LE	0.	-1200.	200.	-1200.
1025-	PLOAD1	100	31	MY	LE	0.	72E+4	200.	72E+4
1026-	PLOAD1	100	32	FZ	LE	0.	-1200.	200.	-1200.
1027-	PLOAD1	100	32	MY	LE	0.	72E+4	200.	72E+4
1028-	PLOAD1	100	33	FZ	LE	0.	-1200.	200.	-1200.
1029-	PLOAD1	100	33	MY	LE	0.	72E+4	200.	72E+4
1030-	PLOAD1	100	34	FZ	LE	0.	-1200.	200.	-1200.
1031-	PLOAD1	100	34	MY	LE	0.	72E+4	200.	72E+4
1032-	PLOAD1	100	35	FZ	LE	0.	-1200.	200.	-1200.
1033-	PLOAD1	100	35	MY	LE	0.	72E+4	200.	72E+4
1034-	PLOAD1	100	36	FZ	LE	0.	-1200.	200.	-1200.
1035-	PLOAD1	100	36	MY	LE	0.	72E+4	200.	72E+4
1036-	PLOAD1	100	37	FZ	LE	0.	-1200.	200.	-1200.
1037-	PLOAD1	100	37	MY	LE	0.	72E+4	200.	72E+4
1038-	PLOAD1	100	38	FZ	LE	0.	-1200.	200.	-1200.
1039-	PLOAD1	100	38	MY	LE	0.	72E+4	200.	72E+4
1040-	PLOAD1	100	39	FZ	LE	0.	-1200.	200.	-1200.
1041-	PLOAD1	100	39	MY	LE	0.	72E+4	200.	72E+4
1042-	PLOAD1	100	40	FZ	LE	0.	-1200.	200.	-1200.
1043-	PLOAD1	100	40	MY	LE	0.	72E+4	200.	72E+4
1044-	PLOAD1	100	41	FZ	LE	0.	-1200.	200.	-1200.
1045-	PLOAD1	100	41	MY	LE	0.	72E+4	200.	72E+4
1046-	PLOAD1	100	42	FZ	LE	0.	-1200.	200.	-1200.
1047-	PLOAD1	100	42	MY	LE	0.	72E+4	200.	72E+4
1048-	PLOAD1	100	43	FZ	LE	0.	-1200.	200.	-1200.
1049-	PLOAD1	100	43	MY	LE	0.	72E+4	200.	72E+4
1050-	PLOAD1	100	44	FZ	LE	0.	-1200.	200.	-1200.
1051-	PLOAD1	100	44	MY	LE	0.	72E+4	200.	72E+4
1052-	PLOAD1	100	45	FZ	LE	0.	-1200.	200.	-1200.
1053-	PLOAD1	100	45	MY	LE	0.	72E+4	200.	72E+4

Note: All other input data are the same as in symmetrical load case.

' Input Data for Continuous Horizontal Curved Beam Using
 Rectangular Coordinates : -

N A S T R A N E X E C U T I V E C O N T R O L D E C K E C H O

ID ARTHIT,WIN2
 SOL 24
 TIME 20
 CEND

C A S E C O N T R O L D E C K E C H O

CARD	
COUNT	
1	TITLE=CURVE BEAM
2	SUBTITLE=131 NODES USING LINEAR BEAU ELEMENT.
3	DISPLACEMENT=ALL
4	\$TRESS=ALL
5	SPCFORCE=ALL
6	ELFORCE=ALL
7	SUSCASE 1
8	LOAD=100
9	SUBCASE 2
10	LOAD-1
11	\$SUBCASE 2
12	\$LOAD=14
13	BEGIN BULK

INPUT BULK DATA CARD COUNT = 600

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1-	CBEAM	1	1	1	1	1	1	0		
2-	CBEAH	2	2	2	2	2	2	0		
3-	CBEAH	3	3	3	3	3	3	0		
4-	CBEAH	4	4	4	4	4	4	0		
5-	CBEAH	5	5	5	5	5	5	0		
6-	CBEAM	6	6	6	6	6	6	0		
7-	CBEAM	7	7	7	7	7	7	0		
8-	CBEAM	8	8	8	8	8	8	0		
9-	CBEAR	9	9	9	9	9	9	0		
10-	CBEAM	10	10	10	10	10	10	0		
11-	CBEAH	11	11	11	11	11	11	0		
12-	CBEAH	12	12	12	12	12	12	0		
13-	CBEAM	13	13	13	13	13	13	0		
14-	CBEAH	14	14	14	14	14	14	0		
15-	CBEAH	15	15	15	15	15	15	0		
16-	CBEAM	16	16	16	16	16	16	0		
17-	CBEAR	17	17	17	17	17	17	0		
18-	CBEAM	18	18	18	18	18	18	0		
19-	CBEAH	19	19	19	19	19	19	0		
20-	CBEAM	20	20	20	20	20	20	0		
21-	CBEAM	21	21	21	21	21	21	0		
22-	CBEAH	22	22	22	22	22	22	0		
23-	CBEAH	23	23	23	23	23	23	0		
24-	CBEAM	24	24	24	24	24	24	0		
25-	CBEAM	25	25	25	25	25	25	0		
26-	CBEAH	26	26	26	26	26	26	0		
27-	CBEAM	27	27	27	27	27	27	0		
28-	CBEAM	28	28	28	28	28	28	0		
29-	CBEAH	29	29	29	29	29	29	0		
30-	CBEAM	30	30	30	30	30	30	0		
31-	CBEAM	31	31	31	31	31	31	0		
32-	CBEAH	32	32	32	32	32	32	0		
33-	CBEAH	33	33	33	33	33	33	0		
34-	CBEAM	34	34	34	34	34	34	0		
35-	CBEAM	35	35	35	35	35	35	0		
36-	CBEAH	36	36	36	36	36	36	0		
37-	CBEAM	37	37	37	37	37	37	0		
38-	CBEAM	38	38	38	38	38	38	0		
39-	CBEAM	39	39	39	39	39	39	0		
40-	CBEAH	40	40	40	40	40	40	0		
41-	CBEAM	41	41	41	41	41	41	0		
42-	CBEAM	42	42	42	42	42	42	0		
43-	CBEAM	43	43	43	43	43	43	0		
44-	CBEAM	44	44	44	44	44	44	0		
45-	CBEAM	45	45	45	45	45	45	0		
46-	CBEAM	46	46	46	46	46	46	0		
47-	CBEAH	47	47	47	47	47	47	0		
48-	CBEAH	48	48	48	48	48	48	0		
49-	CBEAH	49	49	49	49	49	49	0		
50-	CBEAH	50	50	50	50	50	50	0		
51-	CBEAH	51	51	51	51	51	51	0		
52-	CBEAM	52	52	52	52	52	52	0		
53-	CBEAH	53	53	53	53	53	53	0		
54-	CBEAH	54	54	54	54	54	54	0		
55-	CBEAH	55	55	55	55	55	55	0		
56-	CBEAH	56	56	56	56	56	56	0		
57-	CBEAH	57	57	57	57	57	57	0		
58-	CBEAR	58	58	58	58	58	58	0		
59-	CBEAM	59	59	59	59	59	59	0		
60-	CBEAM	60	60	60	60	60	60	0		
61-	CBEAM	61	61	61	61	61	61	0		
62-	CBEAM	62	62	62	62	62	62	0		
63-	CBEAM	63	63	63	63	63	63	0		
64-	CBEAM	64	64	64	64	64	64	0		
65-	CBEAR	65	65	65	65	65	65	0		
66-	CBEAM	66	66	66	66	66	66	0		
67-	CBEAM	67	67	67	67	67	67	0		
68-	CBEAM	68	68	68	68	68	68	0		
69-	CBEAM	69	69	69	69	69	69	0		
70-	CBEAM	70	70	70	70	70	70	0		
71-	CBEAM	71	71	71	71	71	71	0		
72-	CBEAM	72	72	72	72	72	72	0		
73-	CBEAM	73	73	73	73	73	73	0		
74-	CBEAM	74	74	74	74	74	74	0		
75-	CBEAM	75	75	75	75	75	75	0		
76-	CBEAM	76	76	76	76	76	76	0		
77-	CBEAM	77	77	77	77	77	77	0		
78-	CBEAM	78	78	78	78	78	78	0		
79-	CBEAM	79	79	79	79	79	79	0		
80-	CBEAH	80	80	80	80	80	80	0		
81-	CBEAH	81	81	81	81	81	81	0		
82-	CBEAR	82	82	82	82	82	82	0		
83-	CBEAM	83	83	83	83	83	83	0		
84-	CBEAM	84	84	84	84	84	84	0		
85-	CBEAM	85	85	85	85	85	85	0		
86-	CBEAM	86	86	86	86	86	86	0		
87-	CBEAH	87	87	87	87	87	87	0		
88-	CBEAH	88	88	88	88	88	88	0		
89-	CBEAH	89	89	89	89	89	89	0		
90-	CBEAH	90	90	90	90	90	90	0		
91-	CBEAM	91	91	91	91	91	91	0		
92-	CBEAM	92	92	92	92	92	92	0		
93-	CBEAR	93	93	93	93	93	93	0		
94-	CBEAH	94	94	94	94	94	94	0		
95-	CBEAM	95	95	95	95	95	95	0		
96-	CBEAM	96	96	96	96	96	96	0		
97-	CBEAH	97	97	97	97	97	97	0		
98-	CBEAM	98	98	98	98	98	98	0		
99-	CBEAM	99	99	99	99	99	99	0		
100-	CBEAH	100	100	100	100	100	100	0		

CARD COUNT		2	3	4	5	6	7	8	9	10
101-	CBEAM	101	9	101	102	1	0	0		
102-	CBEAR	102	9	102	103	1	1	0		
103-	CBEAM	103	9	103	104	1	1	0		
104-	CBEAM	104	9	104	105	1	1	0		
105-	CBEAR	105	9	105	106	1	1	0		
106-	CBEAM	106	9	106	107	1	1	0		
107-	CBEAR	107	9	107	108	1	1	0		
108-	CBEAR	108	9	108	109	1	1	0		
109-	CBEAR	109	9	109	110	1	1	0		
110-	CBEAM	110	9	110	111	1	1	0		
111-	CBEAM	111	9	111	112	1	1	0		
112-	CBEAM	112	9	112	113	1	1	0		
113-	CBEAM	113	9	113	114	1	1	0		
114-	CBEAM	114	9	114	115	1	1	0		
115-	CBEAM	115	9	115	116	1	1	0		
116-	CBEAM	116	9	116	117	1	1	0		
117-	CBEAM	117	9	117	118	1	1	0		
118-	CBEAM	118	9	118	119	1	1	0		
119-	CBEAM	119	9	119	120	1	1	0		
120-	CBEAR	120	9	120	121	1	1	0		
121-	CBEAR	121	9	121	122	1	1	0		
122-	CBEAR	122	9	122	123	1	1	0		
123-	CBEAR	123	9	123	124	1	1	0		
124-	CBEAR	124	9	124	125	1	1	0		
125-	CBEAM	125	9	125	126	1	1	0		
126-	CBEAR	126	9	126	127	1	1	0		
127-	CBEAM	127	9	127	128	1	1	0		
128-	CBEAM	128	9	128	129	1	1	0		
129-	CBEAR	129	9	129	130	1	1	0		
130-	CBEAM	130	9	130	131	1	1	0		
131-	CORDI	3	3	133	41					
132-	CORDI	3	3	133	91					
133-	CORDI	23	2	133	91					
134-	FORCE	1	2	133	131					
135-	GRID	1	2	455	74	0	0	-8		
136-	GRID	2	3	455	739	0	0	1235		
137-	GRID	3	4	455	736	0	0			
138-	GRID	4	5	455	730	0	0			
139-	GRID	5	6	455	722	0	0			
140-	GRID	6	7	455	716	0	0			
141-	GRID	7	8	455	7	0	0			
142-	GRID	8	9	455	686	0	0			
143-	GRID	9	10	455	67	0	0			
144-	GRID	10	11	455	651	0	0			
145-	GRID	11	12	455	630	0	0			
146-	GRID	12	13	455	607	0	0			
147-	GRID	13	14	455	582	0	0			
148-	GRID	14	15	455	555	0	0			
149-	GRID	15	16	455	525	0	0			
150-	GRID	16	17	455	493	0	0			
151-	GRID	17	18	455	459	0	0			
152-	GRID	18	19	455	423	0	0			
153-	GRID	19	20	455	385	0	0			
154-	GRID	20	21	455	344	0	0			
155-	GRID	21	22	455	301	0	0			
156-	GRID	22	23	455	256	0	0			
157-	GRID	23	24	455	209	0	0			
158-	GRID	24	25	455	160	0	0			
159-	GRID	25	26	455	108	0	0			
160-	GRID	26	27	455	054	0	0			
161-	GRID	27	28	454	999	0	0			
162-	GRID	28	29	454	940	0	0			
163-	GRID	29	30	454	88	0	0			
164-	GRID	30	31	454	818	0	0			
165-	GRID	31	32	454	783	0	0			
166-	GRID	32	33	454	686	0	0			
167-	GRID	33	34	454	617	0	0			
168-	GRID	34	35	454	546	0	0			
169-	GRID	35	36	454	472	0	0			
170-	GRID	36	37	454	397	0	0			
171-	GRID	37	38	454	319	0	0			
172-	GRID	38	39	454	239	0	0			
173-	GRID	39	40	454	156	0	0			
174-	GRID	40	41	454	072	0	0			
175-	GRID	41	42	453	986	0	3	1235		
176-	GRID	42	43	453	897	0	0			
177-	GRID	43	44	453	806	0	0			
178-	GRID	44	45	453	713	0	0			
179-	GRID	45	46	453	618	0	0			
180-	GRID	46	47	453	502	0	0			
181-	GRID	47	48	453	421	0	0			
182-	GRID	48	49	453	319	0	0			
183-	GRID	49	50	453	215	0	0			
184-	GRID	50	51	453	108	0	0			
185-	GRID	51	52	453	0	0	0			
186-	GRID	52	53	452	889	0	0			
187-	GRID	53	54	452	777	0	0			
188-	GRID	54	55	452	662	0	0			
189-	GRID	55	56	452	544	0	0			
190-	GRID	56	57	452	425	0	0			
191-	GRID	57	58	452	304	0	0			
192-	GRID	58	59	452	180	0	0			
193-	GRID	59	60	452	054	0	0			
194-	GRID	60	61	451	926	0	0			
195-	GRID	61	62	451	796	0	0			
196-	GRID	62	63	451	664	0	0			
197-	GRID	63	64	451	529	0	0			
198-	GRID	64	65	451	392	0	0			
199-	GRID	65	66	451	254	0	0			
200-	GRID	66		451	126	0	0			

CARD COUNT	1	2	3	4	5	6	7	8	9	10
201-	GRID	67	450.969	65.789	0.					
202-	GRID	68	450.824	66.759	0.					
203-	GRID	69	450.676	67.737	0.					
204-	GRID	70	450.527	68.715	0.					
205-	GRID	71	450.375	69.693	0.					
206-	GRID	72	450.222	70.671	0.					
207-	GRID	73	450.064	71.649	0.					
208-	GRID	74	449.906	72.627	0.					
209-	GRID	75	449.745	73.605	0.					
210-	GRID	76	449.583	74.583	0.					
211-	GRID	77	449.418	75.561	0.					
212-	GRID	78	449.251	76.539	0.					
213-	GRID	79	449.081	77.517	0.					
214-	GRID	80	448.910	78.495	0.					
215-	GRID	81	448.737	79.473	0.					
216-	GRID	82	448.561	80.451	0.					
217-	GRID	83	448.383	81.429	0.					
218-	GRID	84	448.203	82.407	0.					
219-	GRID	85	448.021	83.385	0.					
220-	GRID	86	447.836	84.363	0.					
221-	GRID	87	447.650	85.341	0.					
222-	GRID	88	447.461	86.319	0.					
223-	GRID	89	447.270	87.297	0.					
224-	GRID	90	447.077	88.275	0.					
225-	GRID	91	446.882	89.253	0.	13	1235			
226-	GRID	92	446.685	90.231	0.					
227-	GRID	93	446.485	91.209	0.					
228-	GRID	94	446.284	92.187	0.					
229-	GRID	95	446.080	93.165	0.					
230-	GRID	96	445.874	94.143	0.					
231-	GRID	97	445.666	95.121	0.					
232-	GRID	98	445.456	96.099	0.					
233-	GRID	99	445.244	97.077	0.					
234-	GRID	100	445.029	98.055	0.					
235-	GRID	101	444.813	99.033	0.					
236-	GRID	102	444.594	100.011	0.					
237-	GRID	103	444.373	101.000	0.					
238-	GRID	104	444.150	102.000	0.					
239-	GRID	105	443.925	103.000	0.					
240-	GRID	106	443.698	104.000	0.					
241-	GRID	107	443.468	105.000	0.					
242-	GRID	108	443.237	106.000	0.					
243-	GRID	109	443.003	107.000	0.					
244-	GRID	110	442.767	108.000	0.					
245-	GRID	111	442.529	109.000	0.					
246-	GRID	112	442.289	110.000	0.					
247-	GRID	113	442.047	111.000	0.					
248-	GRID	114	441.803	112.000	0.					
249-	GRID	115	441.556	113.000	0.					
250-	GRID	116	441.308	114.000	0.					
251-	GRID	117	441.057	115.000	0.					
252-	GRID	118	440.804	116.000	0.					
253-	GRID	119	440.549	117.000	0.					
254-	GRID	120	440.292	118.000	0.					
255-	GRID	121	440.033	119.000	0.					
256-	GRID	122	439.771	120.000	0.					
257-	GRID	123	439.508	121.000	0.					
258-	GRID	124	439.242	122.000	0.					
259-	GRID	125	438.975	123.000	0.					
260-	GRID	126	438.705	124.000	0.					
261-	GRID	127	438.433	125.000	0.					
262-	GRID	128	438.159	126.000	0.					
263-	GRID	129	437.883	127.000	0.					
264-	GRID	130	437.605	128.000	0.					
265-	GRID	131	437.324	129.000	0.	23	1235			
266-	GRID	132	0.	0.	1.		123456			
267-	GRID	133	0.	0.	1.		123456			
268-	HATT	19	0.	0.	1.		123456			
269-	PBEAM	9	4.32E+6	.3	9.02E-03		2.55E-04			
270-	PLOAD1	100	1	.241	.2845	-1.25	1.0	-1.25		
271-	PLOAD1	100	2			-1.25	1.0	-1.25		
272-	PLOAD1	100	3			-1.25	1.0	-1.25		
273-	PLOAD1	100	4			-1.25	1.0	-1.25		
274-	PLOAD1	100	5			-1.25	1.0	-1.25		
275-	PLOAD1	100	6			-1.25	1.0	-1.25		
276-	PLOAD1	100	7			-1.25	1.0	-1.25		
277-	PLOAD1	100	8			-1.25	1.0	-1.25		
278-	PLOAD1	100	9			-1.25	1.0	-1.25		
279-	PLOAD1	100	10			-1.25	1.0	-1.25		
280-	PLOAD1	100	11			-1.25	1.0	-1.25		
281-	PLOAD1	100	12			-1.25	1.0	-1.25		
282-	PLOAD1	100	13			-1.25	1.0	-1.25		
283-	PLOAD1	100	14			-1.25	1.0	-1.25		
284-	PLOAD1	100	15			-1.25	1.0	-1.25		
285-	PLOAD1	100	16			-1.25	1.0	-1.25		
286-	PLOAD1	100	17			-1.25	1.0	-1.25		
287-	PLOAD1	100	18			-1.25	1.0	-1.25		
288-	PLOAD1	100	19			-1.25	1.0	-1.25		
289-	PLOAD1	100	20			-1.25	1.0	-1.25		
290-	PLOAD1	100	21			-1.25	1.0	-1.25		
291-	PLOAD1	100	22			-1.25	1.0	-1.25		
292-	PLOAD1	100	23			-1.25	1.0	-1.25		
293-	PLOAD1	100	24			-1.25	1.0	-1.25		
294-	PLOAD1	100	25			-1.25	1.0	-1.25		
295-	PLOAD1	100	26			-1.25	0.98	-1.25		
296-	PLOAD1	100	27			-1.25	1.0	-1.25		
297-	PLOAD1	100	28			-1.25	1.0	-1.25		
298-	PLOAD1	100	29			-1.25	1.0	-1.25		
299-	PLOAD1	100	30			-1.25	1.0	-1.25		
300-	PLOAD1	100	31			-1.25	1.0	-1.25		

CARD COUNT	1	2	3	4	5	6	7	8	9	10
301-	LOAD1	100	32	FZ	LE	0.0	0.0	0.98	0.0	0.0
302-	LOAD1	100	33	FZ	LE	0.0	0.0	1.0	0.0	0.0
303-	LOAD1	100	34	FZ	LE	0.0	0.0	0.98	0.0	0.0
304-	LOAD1	100	35	FZ	LE	0.0	0.0	0.98	0.0	0.0
305-	LOAD1	100	36	FZ	LE	0.0	0.0	1.0	0.0	0.0
306-	LOAD1	100	37	FZ	LE	0.0	0.0	1.0	0.0	0.0
307-	LOAD1	100	38	FZ	LE	0.0	0.0	1.0	0.0	0.0
308-	LOAD1	100	39	FZ	LE	0.0	0.0	0.98	0.0	0.0
309-	LOAD1	100	40	FZ	LE	0.0	0.0	1.0	0.0	0.0
310-	LOAD1	100	41	FZ	LE	0.0	0.0	0.98	0.0	0.0
311-	LOAD1	100	42	FZ	LE	0.0	0.0	1.0	0.0	0.0
312-	LOAD1	100	43	FZ	LE	0.0	0.0	1.0	0.0	0.0
313-	LOAD1	100	44	FZ	LE	0.0	0.0	0.98	0.0	0.0
314-	LOAD1	100	45	FZ	LE	0.0	0.0	1.0	0.0	0.0
315-	LOAD1	100	46	FZ	LE	0.0	0.0	0.98	0.0	0.0
316-	LOAD1	100	47	FZ	LE	0.0	0.0	1.0	0.0	0.0
317-	LOAD1	100	48	FZ	LE	0.0	0.0	0.98	0.0	0.0
318-	LOAD1	100	49	FZ	LE	0.0	0.0	0.98	0.0	0.0
319-	LOAD1	100	50	FZ	LE	0.0	0.0	1.0	0.0	0.0
320-	LOAD1	100	51	FZ	LE	0.0	0.0	0.98	0.0	0.0
321-	LOAD1	100	52	FZ	LE	0.0	0.0	1.0	0.0	0.0
322-	LOAD1	100	53	FZ	LE	0.0	0.0	0.98	0.0	0.0
323-	LOAD1	100	54	FZ	LE	0.0	0.0	1.0	0.0	0.0
324-	LOAD1	100	55	FZ	LE	0.0	0.0	1.0	0.0	0.0
325-	LOAD1	100	56	FZ	LE	0.0	0.0	0.98	0.0	0.0
326-	LOAD1	100	57	FZ	LE	0.0	0.0	0.98	0.0	0.0
327-	LOAD1	100	58	FZ	LE	0.0	0.0	1.0	0.0	0.0
328-	LOAD1	100	59	FZ	LE	0.0	0.0	1.0	0.0	0.0
329-	LOAD1	100	60	FZ	LE	0.0	0.0	1.0	0.0	0.0
330-	LOAD1	100	61	FZ	LE	0.0	0.0	0.98	0.0	0.0
331-	LOAD1	100	62	FZ	LE	0.0	0.0	1.0	0.0	0.0
332-	LOAD1	100	63	FZ	LE	0.0	0.0	0.98	0.0	0.0
333-	LOAD1	100	64	FZ	LE	0.0	0.0	1.0	0.0	0.0
334-	LOAD1	100	65	FZ	LE	0.0	0.0	0.98	0.0	0.0
335-	LOAD1	100	66	FZ	LE	0.0	0.0	1.0	0.0	0.0
336-	LOAD1	100	67	FZ	LE	0.0	0.0	1.0	0.0	0.0
337-	LOAD1	100	68	FZ	LE	0.0	0.0	1.0	0.0	0.0
338-	LOAD1	100	69	FZ	LE	0.0	0.0	1.0	0.0	0.0
339-	LOAD1	100	70	FZ	LE	0.0	0.0	0.98	0.0	0.0
340-	LOAD1	100	71	FZ	LE	0.0	0.0	0.98	0.0	0.0
341-	LOAD1	100	72	FZ	LE	0.0	0.0	1.0	0.0	0.0
342-	LOAD1	100	73	FZ	LE	0.0	0.0	1.0	0.0	0.0
343-	LOAD1	100	74	FZ	LE	0.0	0.0	0.98	0.0	0.0
344-	LOAD1	100	75	FZ	LE	0.0	0.0	1.0	0.0	0.0
345-	LOAD1	100	76	FZ	LE	0.0	0.0	1.0	0.0	0.0
346-	LOAD1	100	77	FZ	LE	0.0	0.0	0.98	0.0	0.0
347-	LOAD1	100	78	FZ	LE	0.0	0.0	1.0	0.0	0.0
348-	LOAD1	100	79	FZ	LE	0.0	0.0	0.98	0.0	0.0
349-	LOAD1	100	80	FZ	LE	0.0	0.0	1.0	0.0	0.0
350-	LOAD1	100	81	FZ	LE	0.0	0.0	0.98	0.0	0.0
351-	LOAD1	100	82	FZ	LE	0.0	0.0	1.0	0.0	0.0
352-	LOAD1	100	83	FZ	LE	0.0	0.0	0.98	0.0	0.0
353-	LOAD1	100	84	FZ	LE	0.0	0.0	0.98	0.0	0.0
354-	LOAD1	100	85	FZ	LE	0.0	0.0	1.0	0.0	0.0
355-	LOAD1	100	86	FZ	LE	0.0	0.0	0.98	0.0	0.0
356-	LOAD1	100	87	FZ	LE	0.0	0.0	0.98	0.0	0.0
357-	LOAD1	100	88	FZ	LE	0.0	0.0	0.98	0.0	0.0
358-	LOAD1	100	89	FZ	LE	0.0	0.0	1.0	0.0	0.0
359-	LOAD1	100	90	FZ	LE	0.0	0.0	1.0	0.0	0.0
360-	LOAD1	100	91	FZ	LE	0.0	0.0	0.98	0.0	0.0
361-	LOAD1	100	92	FZ	LE	0.0	0.0	1.0	0.0	0.0
362-	LOAD1	100	93	FZ	LE	0.0	0.0	1.0	0.0	0.0
363-	LOAD1	100	94	FZ	LE	0.0	0.0	1.0	0.0	0.0
364-	LOAD1	100	95	FZ	LE	0.0	0.0	0.98	0.0	0.0
365-	LOAD1	100	96	FZ	LE	0.0	0.0	0.98	0.0	0.0
366-	LOAD1	100	97	FZ	LE	0.0	0.0	0.98	0.0	0.0
367-	LOAD1	100	98	FZ	LE	0.0	0.0	1.0	0.0	0.0
368-	LOAD1	100	99	FZ	LE	0.0	0.0	1.0	0.0	0.0
369-	LOAD1	100	100	FZ	LE	0.0	0.0	0.98	0.0	0.0
370-	LOAD1	100	101	FZ	LE	0.0	0.0	1.0	0.0	0.0
371-	LOAD1	100	102	FZ	LE	0.0	0.0	0.98	0.0	0.0
372-	LOAD1	100	103	FZ	LE	0.0	0.0	1.0	0.0	0.0
373-	LOAD1	100	104	FZ	LE	0.0	0.0	0.98	0.0	0.0
374-	LOAD1	100	105	FZ	LE	0.0	0.0	1.0	0.0	0.0
375-	LOAD1	100	106	FZ	LE	0.0	0.0	1.0	0.0	0.0
376-	LOAD1	100	107	FZ	LE	0.0	0.0	1.0	0.0	0.0
377-	LOAD1	100	108	FZ	LE	0.0	0.0	0.98	0.0	0.0
378-	LOAD1	100	109	FZ	LE	0.0	0.0	0.98	0.0	0.0
379-	LOAD1	100	110	FZ	LE	0.0	0.0	1.0	0.0	0.0
380-	LOAD1	100	111	FZ	LE	0.0	0.0	1.0	0.0	0.0
381-	LOAD1	100	112	FZ	LE	0.0	0.0	0.98	0.0	0.0
382-	LOAD1	100	113	FZ	LE	0.0	0.0	0.98	0.0	0.0
383-	LOAD1	100	114	FZ	LE	0.0	0.0	1.0	0.0	0.0
384-	LOAD1	100	115	FZ	LE	0.0	0.0	0.98	0.0	0.0
385-	LOAD1	100	116	FZ	LE	0.0	0.0	1.0	0.0	0.0
386-	LOAD1	100	117	FZ	LE	0.0	0.0	1.0	0.0	0.0
387-	LOAD1	100	118	FZ	LE	0.0	0.0	1.0	0.0	0.0
388-	LOAD1	100	119	FZ	LE	0.0	0.0	0.98	0.0	0.0
389-	LOAD1	100	120	FZ	LE	0.0	0.0	1.0	0.0	0.0
390-	LOAD1	100	121	FZ	LE	0.0	0.0	1.0	0.0	0.0
391-	LOAD1	100	122	FZ	LE	0.0	0.0	1.0	0.0	0.0
392-	LOAD1	100	123	FZ	LE	0.0	0.0	1.0	0.0	0.0
393-	LOAD1	100	124	FZ	LE	0.0	0.0	0.98	0.0	0.0
394-	LOAD1	100	125	FZ	LE	0.0	0.0	1.0	0.0	0.0
395-	LOAD1	100	126	FZ	LE	0.0	0.0	1.0	0.0	0.0
396-	LOAD1	100	127	FZ	LE	0.0	0.0	0.98	0.0	0.0
397-	LOAD1	100	128	FZ	LE	0.0	0.0	1.0	0.0	0.0
398-	LOAD1	100	129	FZ	LE	0.0	0.0	0.98	0.0	0.0
399-	LOAD1	100	130	FZ	LE	0.0	0.0	1.0	0.0	0.0
	ENDDATA									

TOTAL COUNT= U00

Input Data for Continuous Horizontal Curved **Beam** Using
Cylindrical Coordinates

N A S T R A N E X E C U T I V E C O N T R O L D E C K e c h o

ID ARTHIT,WIN24
SOL 24
TIRE 20
CEND

C A S E C O N T R O L D E C K E C H O

CARD COUNT	
1	TITLE=CURVE BEAM
2	SUBTITLE=131 NODES , USING LINEAR BEAM ELEMENT.
3	DISPLACEMENT=ALL
4	SPCFORCE=ALL
5	ELFORCE=ALL
6	SUBCASE 1
7	LOAD=100
8	BEGIN BULK

INPUT BULK DATA CARD COUNT = 601

CARD COUNT	1	2	3	4	5	6	7	8	9	..
1-	CB EAM	1	9	1	2	1.	1.	0.		
2-	CB EAM	2	9	2	3	1.	1.	0.		
3-	CB EAM	3	9	3	4	1.	1.	0.		
4-	CB EAM	4	9	4	5	1.	1.	0.		
5-	CB EAM	5	9	5	6	1.	1.	0.		
6-	CB EAM	6	9	6	7	1.	1.	0.		
7-	CB EAM	7	9	7	8	1.	1.	0.		
8-	CB EAM	8	9	8	9	1.	1.	0.		
9-	CB EAM	9	9	9	10	1.	1.	0.		
10-	CB EAM	10	9	10	11	1.	1.	0.		
11-	CB EAM	11	9	11	12	1.	1.	0.		
12-	CB EAM	12	9	12	13	1.	1.	0.		
13-	CB EAM	13	9	13	14	1.	1.	0.		
14-	CB EAM	14	9	14	15	1.	1.	0.		
15-	CB EAM	15	9	15	16	1.	1.	0.		
16-	CB EAM	16	9	16	17	1.	1.	0.		
17-	CB EAM	17	9	17	18	1.	1.	0.		
18-	CB EAM	18	9	18	19	1.	1.	0.		
19-	CB EAM	19	9	19	20	1.	1.	0.		
20-	CB EAM	20	9	20	21	1.	1.	0.		
21-	CB EAM	21	9	21	22	1.	1.	0.		
22-	CB EAM	22	9	22	23	1.	1.	0.		
23-	CB EAM	23	9	23	24	1.	1.	0.		
24-	CB EAM	24	9	24	25	1.	1.	0.		
25-	CB EAM	25	9	25	26	1.	1.	0.		
26-	CB EAM	26	9	26	27	1.	1.	0.		
27-	CB EAM	27	9	27	28	1.	1.	0.		
28-	CB EAM	28	9	28	29	1.	1.	0.		
29-	CB EAM	29	9	29	30	1.	1.	0.		
30-	CB EAM	30	9	30	31	1.	1.	0.		
31-	CB EAM	31	9	31	32	1.	1.	0.		
32-	CB EAM	32	9	32	33	1.	1.	0.		
33-	CB EAM	33	9	33	34	1.	1.	0.		
34-	CB EAM	34	9	34	35	1.	1.	0.		
35-	CB EAM	35	9	35	36	1.	1.	0.		
36-	CB EAM	36	9	36	37	1.	1.	0.		
37-	CB EAM	37	9	37	38	1.	1.	0.		
38-	CB EAM	38	9	38	39	1.	1.	0.		
39-	CB EAM	39	9	39	40	1.	1.	0.		
40-	CB EAM	40	9	40	41	1.	1.	0.		
41-	CB EAM	41	9	41	42	1.	1.	0.		
42-	CB EAM	42	9	42	43	1.	1.	0.		
43-	CB EAM	43	9	43	44	1.	1.	0.		
44-	CB EAM	44	9	44	45	1.	1.	0.		
45-	CB EAM	45	9	45	46	1.	1.	0.		
46-	CB EAM	46	9	46	47	1.	1.	0.		
47-	CB EAM	47	9	47	48	1.	1.	0.		
48-	CB EAM	48	9	48	49	1.	1.	0.		
49-	CB EAM	49	9	49	50	1.	1.	0.		
50-	CB EAM	50	9	50	51	1.	1.	0.		
51-	CB EAM	51	9	51	52	1.	1.	0.		
52-	CB EAO	52	9	52	53	1.	1.	0.		
53-	CB EAM	53	9	53	54	1.	1.	0.		
54-	CB EAM	54	9	54	55	1.	1.	0.		
55-	CB EAM	55	9	55	56	1.	1.	0.		
56-	CB EAO	56	9	56	57	1.	1.	0.		
57-	CB EAM	57	9	57	58	1.	1.	0.		
58-	CB EAM	58	9	58	59	1.	1.	0.		
59-	CB EAM	59	9	59	60	1.	1.	0.		
60-	CB EAM	60	9	60	61	1.	1.	0.		
61-	CB EAC	61	9	61	62	1.	1.	0.		
62-	CB EAM	62	9	62	63	1.	1.	0.		
63-	CB EAM	63	9	63	64	1.	1.	0.		
64-	CB EAM	64	9	64	65	1.	1.	0.		
65-	CB EAM	65	9	65	66	1.	1.	0.		
66-	CB EAM	66	9	66	67	1.	1.	0.		
67-	CB EAM	67	9	67	68	1.	1.	0.		
68-	CB EAM	68	9	68	69	1.	1.	0.		
69-	CB EAM	69	9	69	70	1.	1.	0.		
70-	CB EAM	70	9	70	71	1.	1.	0.		
71-	CB EAM	71	9	71	72	1.	1.	0.		
72-	CB EAM	72	9	72	73	1.	1.	0.		
73-	CB EAM	73	9	73	74	1.	1.	0.		
74-	CB EAM	74	9	74	75	1.	1.	0.		
75-	CB EAM	75	9	75	76	1.	1.	0.		
76-	CB EAM	76	9	76	77	1.	1.	0.		
77-	CB EAM	77	9	77	78	1.	1.	0.		
78-	CB EAM	78	9	78	79	1.	1.	0.		
79-	CB EAM	79	9	79	80	1.	1.	0.		
80-	CB EAM	80	9	80	81	1.	1.	0.		
81-	CB EAM	81	9	81	82	1.	1.	0.		
82-	CB EAM	82	9	82	83	1.	1.	0.		
83-	CB EAM	83	9	83	84	1.	1.	0.		
84-	CB EAM	84	9	84	85	1.	1.	0.		
85-	CB EAM	85	9	85	86	1.	1.	0.		
86-	CB EAM	86	9	86	87	1.	1.	0.		
87-	CB EAM	87	9	87	88	1.	1.	0.		
88-	CB EAM	88	9	88	89	1.	1.	0.		
89-	CB EAM	89	9	89	90	1.	1.	0.		
90-	CB EAM	90	9	90	91	1.	1.	0.		
91-	CB EAM	91	9	91	92	1.	1.	0.		
92-	CB EAM	92	9	92	93	1.	1.	0.		
93-	CB EAM	93	9	93	94	1.	1.	0.		
94-	CB EAM	94	9	94	95	1.	1.	0.		
95-	CB EAM	95	9	95	96	1.	1.	0.		
96-	CB EAM	96	9	96	97	1.	1.	0.		
97-	CB EAM	97	9	97	98	1.	1.	0.		
98-	CB EAM	98	9	98	99	1.	1.	0.		
99-	CB EAM	99	9	99	100	1.	1.	0.		
100-	CB EAM	100	9	100	101	1.	1.	0.		

CARD COUNT	1	2	3	4	5	6	7	8	9	..
101-	CB	101	99	101	102	1.	1.	0.		
102-	BE	102	99	102	103	1.	1.	0.		
103-	AR	103	99	103	104	1.	1.	0.		
104-	EA	104	99	104	105	1.	1.	0.		
105-	AM	105	99	105	106	1.	1.	0.		
106-	CB	106	99	106	107	1.	1.	0.		
107-	BE	107	99	107	108	1.	1.	0.		
108-	AR	108	99	108	109	1.	1.	0.		
109-	EA	109	99	109	110	1.	1.	0.		
110-	AM	110	99	110	111	1.	1.	0.		
111-	CB	111	99	111	112	1.	1.	0.		
112-	BE	112	99	112	113	1.	1.	0.		
113-	AR	113	99	113	114	1.	1.	0.		
114-	EA	114	99	114	115	1.	1.	0.		
115-	AM	115	99	115	116	1.	1.	0.		
116-	CB	116	99	116	117	1.	1.	0.		
117-	BE	117	99	117	118	1.	1.	0.		
118-	AR	118	99	118	119	1.	1.	0.		
119-	EA	119	99	119	120	1.	1.	0.		
120-	AM	120	99	120	121	1.	1.	0.		
121-	CB	121	99	121	122	1.	1.	0.		
122-	BE	122	99	122	123	1.	1.	0.		
123-	AR	123	99	123	124	1.	1.	0.		
124-	EA	124	99	124	125	1.	1.	0.		
125-	AM	125	99	125	126	1.	1.	0.		
126-	CB	126	99	126	127	1.	1.	0.		
127-	BE	127	99	127	128	1.	1.	0.		
128-	AR	128	99	128	129	1.	1.	0.		
129-	EA	129	99	129	130	1.	1.	0.		
130-	AM	130	99	130	131	1.	1.	0.		
131-	COR	33	132	133	134					
132-	DI	3	132	133	41					
133-	RI	13	132	133	91					
134-	OR	23	132	133	131					
135-	FORCE	1	2	1	0.	0.		-8.		
136-	GR	1	33	455.74	0.0	0.		1235		
137-	RI	2	33	455.74	1.2572030	0.				
138-	DD	3	33	455.74	2.5144060	0.				
139-	DD	4	33	455.74	3.7716090	0.				
140-	DD	5	33	455.74	5.0288130	0.				
141-	DD	6	33	455.74	6.2860160	0.				
142-	DD	7	33	455.74	7.5432190	0.				
143-	DD	8	33	455.74	8.8004220	0.				
144-	DD	9	33	455.74	1.0057620	0.				
145-	DD	10	33	455.74	1.314830	0.				
146-	DD	11	33	455.74	1.2572030	0.				
147-	DD	12	33	455.74	1.3829240	0.				
148-	DD	13	33	455.74	1.5086440	0.				
149-	DD	14	33	455.74	1.6343640	0.				
150-	DD	15	33	455.74	1.7600840	0.				
151-	DD	16	33	455.74	1.8858050	0.				
152-	DD	17	33	455.74	2.0115250	0.				
153-	DD	18	33	455.74	2.1372450	0.				
154-	DD	19	33	455.74	2.2629660	0.				
155-	DD	20	33	455.74	2.3886860	0.				
156-	DD	21	33	455.74	2.5144060	0.				
157-	DD	22	33	455.74	2.6401270	0.				
158-	DD	23	33	455.74	2.7658470	0.				
159-	DD	24	33	455.74	2.8915670	0.				
160-	DD	25	33	455.74	3.0172880	0.				
161-	DD	26	33	455.74	3.1430080	0.				
162-	DD	27	33	455.74	3.2687280	0.				
163-	DD	28	33	455.74	3.3944490	0.				
164-	DD	29	33	455.74	3.5201690	0.				
165-	DD	30	33	455.74	3.6458890	0.				
166-	DD	31	33	455.74	3.7716100	0.				
167-	DD	32	33	455.74	3.8973300	0.				
168-	DD	33	33	455.74	4.0230500	0.				
169-	DD	34	33	455.74	4.1487710	0.				
170-	DD	35	33	455.74	4.2744910	0.				
171-	DD	36	33	455.74	4.4002110	0.				
172-	DD	37	33	455.74	4.5259320	0.				
173-	DD	38	33	455.74	4.6516520	0.				
174-	DD	39	33	455.74	4.7773720	0.				
175-	DD	40	33	455.74	4.9030920	0.				
176-	DD	41	33	455.74	5.0288130	3		1235		
177-	DD	42	33	455.74	5.1545330					
178-	DD	43	33	455.74	5.2802540					
179-	DD	44	33	455.74	5.4059740					
180-	DD	45	33	455.74	5.5316940					
181-	DD	46	33	455.74	5.6574140					
182-	DD	47	33	455.74	5.7831350					
183-	DD	48	33	455.74	5.9088550					
184-	DD	49	33	455.74	6.0345750					
185-	DD	50	33	455.74	6.1602960					
186-	DD	51	33	455.74	6.2860160					
187-	DD	52	33	455.74	6.4117360					
188-	DD	53	33	455.74	6.5374570					
189-	DD	54	33	455.74	6.6631770					
190-	DD	55	33	455.74	6.7888970					
191-	DD	56	33	455.74	6.9146180					
192-	DD	57	33	455.74	7.0403380					
193-	DD	58	33	455.74	7.1660580					
194-	DD	59	33	455.74	7.2917790					
195-	DD	60	33	455.74	7.4174990					
196-	DD	61	33	455.74	7.5432190					
197-	DD	62	33	455.74	7.6689400					
198-	DD	63	33	455.74	7.7946600					
199-	DD	64	33	455.74	7.9203800					
200-	DD	65	33	455.74	8.0461010					

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9
201-	GRID	66	33	455.74	8.1718210.				
202-	GRID	67	33	455.74	8.2975410.				
203-	GRID	68	33	455.74	8.4232620.				
204-	GRID	69	33	455.74	8.5489820.				
205-	GRID	70	33	455.74	8.6747020.				
206-	GRID	71	33	455.74	8.8004220.				
207-	GRID	72	33	455.74	8.9261430.				
208-	GRID	73	33	455.74	9.0518630.				
209-	GRID	74	33	455.74	9.1775840.				
210-	GRID	75	33	455.74	9.3033040.				
211-	GRID	76	33	455.74	9.4290240.				
212-	GRID	77	33	455.74	9.5547440.				
213-	GRID	78	33	455.74	9.6804650.				
214-	GRID	79	33	455.74	9.8061850.				
215-	GRID	80	33	455.74	9.9319050.				
216-	GRID	81	33	455.74	10.057620.				
217-	GRID	82	33	455.74	10.183350.				
218-	GRID	83	33	455.74	10.309070.				
219-	GRID	84	33	455.74	10.434790.				
220-	GRID	85	33	455.74	10.560510.				
221-	GRID	86	33	455.74	10.686230.				
222-	GRID	87	33	455.74	10.811950.				
223-	GRID	88	33	455.74	10.937670.				
224-	GRID	89	33	455.74	11.063390.				
225-	GRID	90	33	455.74	11.189110.				
226-	GRID	91	33	455.74	11.314830.	13		1235	
227-	GRID	92	33	455.74	11.440550.				
228-	GRID	93	33	455.74	11.566270.				
229-	GRID	94	33	455.74	11.691990.				
230-	GRID	95	33	455.74	11.817710.				
231-	GRID	96	33	455.74	11.943430.				
232-	GRID	97	33	455.74	12.069150.				
233-	GRID	98	33	455.74	12.194870.				
234-	GRID	99	33	455.74	12.320590.				
235-	GRID	100	33	455.74	12.446310.				
236-	GRID	101	33	455.74	12.572030.				
237-	GRID	102	33	455.74	12.697750.				
238-	GRID	103	33	455.74	12.823470.				
239-	GRID	104	33	455.74	12.949190.				
240-	GRID	105	33	455.74	13.074910.				
241-	GRID	106	33	455.74	13.200630.				
242-	GRID	107	33	455.74	13.326350.				
243-	GRID	108	33	455.74	13.452070.				
244-	GRID	109	33	455.74	13.577790.				
245-	GRID	110	33	455.74	13.703510.				
246-	GRID	111	33	455.74	13.829230.				
247-	GRID	112	33	455.74	13.954950.				
248-	GRID	113	33	455.74	14.080670.				
249-	GRID	114	33	455.74	14.206390.				
250-	GRID	115	33	455.74	14.332110.				
251-	GRID	116	33	455.74	14.457830.				
252-	GRID	117	33	455.74	14.583550.				
253-	GRID	118	33	455.74	14.709270.				
254-	GRID	119	33	455.74	14.835000.				
255-	GRID	120	33	455.74	14.960720.				
256-	GRID	121	33	455.74	15.086440.				
257-	GRID	122	33	455.74	15.212160.				
258-	GRID	123	33	455.74	15.337880.				
259-	GRID	124	33	455.74	15.463600.				
260-	GRID	125	33	455.74	15.589320.				
261-	GRID	126	33	455.74	15.715040.				
262-	GRID	127	33	455.74	15.840760.				
263-	GRID	128	33	455.74	15.966480.				
264-	GRID	129	33	455.74	16.092200.				
265-	GRID	130	33	455.74	16.217920.				
266-	GRID	131	33	455.74	16.343640.	23		1235	
267-	GRID	132		0.	0.			123456	
268-	GRID	133		0.	0.			123456	
269-	GRID	134		1.	1.			123456	
270-	MAT1	19	4.32E	.3	.3				
271-	PBEAM	9		.2845	9.02E-03			2.55E-04	
272-	LOAD1	100	1	FZ	LE	0.	-1.25	1.0	-1.25
273-	LOAD1	100	2	FZ	LE	0.	-1.25	1.0	-1.25
274-	LOAD1	100	3	FZ	LE	0.	-1.25	1.0	-1.25
275-	LOAD1	100	4	FZ	LE	0.	-1.25	1.0	-1.25
276-	LOAD1	100	5	FZ	LE	0.	-1.25	1.0	-1.25
277-	LOAD1	100	6	FZ	LE	0.	-1.25	1.0	-1.25
278-	LOAD1	100	7	FZ	LE	0.	-1.25	1.0	-1.25
279-	LOAD1	100	8	FZ	LE	0.	-1.25	1.0	-1.25
280-	LOAD1	100	9	FZ	LE	0.	-1.25	1.0	-1.25
281-	LOAD1	100	10	FZ	LE	0.	-1.25	1.0	-1.25
282-	LOAD1	100	11	FZ	LE	0.	-1.25	1.0	-1.25
283-	LOAD1	100	12	FZ	LE	0.	-1.25	1.0	-1.25
284-	LOAD1	100	13	FZ	LE	0.	-1.25	1.0	-1.25
285-	LOAD1	100	14	FZ	LE	0.	-1.25	1.0	-1.25
286-	LOAD1	100	15	FZ	LE	0.	-1.25	1.0	-1.25
287-	LOAD1	100	16	FZ	LE	0.	-1.25	1.0	-1.25
288-	LOAD1	100	17	FZ	LE	0.	-1.25	1.0	-1.25
289-	LOAD1	100	18	FZ	LE	0.	-1.25	1.0	-1.25
290-	LOAD1	100	19	FZ	LE	0.	-1.25	1.0	-1.25
291-	LOAD1	100	20	FZ	LE	0.	-1.25	1.0	-1.25
292-	LOAD1	100	21	FZ	LE	0.	-1.25	1.0	-1.25
293-	LOAD1	100	22	FZ	LE	0.	-1.25	1.0	-1.25
294-	LOAD1	100	23	FZ	LE	0.	-1.25	1.0	-1.25
295-	LOAD1	100	24	FZ	LE	0.	-1.25	1.0	-1.25
296-	LOAD1	100	25	FZ	LE	0.	-1.25	1.0	-1.25
297-	LOAD1	100	26	FZ	LE	0.	-1.25	1.0	-1.25
298-	LOAD1	100	27	FZ	LE	0.	-1.25	1.0	-1.25
299-	LOAD1	100	28	FZ	LE	0.	-1.25	1.0	-1.25
300-	LOAD1	100	29	FZ	LE	0.	-1.25	1.0	-1.25

Input Data for Continuous Straight Beam Used to Compare
the Continuous Horizontal Curved Beam

N A S T R A N E X E C U T I V E C O N T R O L D E C K E C H O

ID ARTHIT,WIN22
SOL 24
TIME 20
CEND

C A S E C O N T R O L D E C K E C H O

CARD COUNT	
1	TITLE=CURVE BEAM
2	SURTITLE=131 YOOES , USING LINEAR BEAR ELEMENT.
3	DISPLACEMENT=ALL
4	\$STRESS=ALL
5	\$SPCFORCE=ALL
6	\$ELFORCE=ALL
7	\$SUBCASE 1
8	LOAD=100
9	\$SUBCASE 2
10	\$LOAD=2
11	\$SUBCASE 3
12	\$LOAD=3
13	\$SUBCASE 4
14	\$LOAD=4
15	\$SUBCASE 5
16	\$LOAD=5
17	BEGIN BULK

INPUT BULK DATA CARD COUNT = 398

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1-	CBEAM	1	9	1	2	1.	1.	0.		
2-	CBEAM	2	9	2	3	1.	1.	0.		
3-	CBEAM	3	9	3	4	1.	1.	0.		
4-	CBEAM	4	9	4	5	1.	1.	0.		
5-	CBEAM	5	9	5	6	1.	1.	0.		
6-	CBEAM	6	9	6	7	1.	1.	0.		
7-	CBEAM	7	9	7	8	1.	1.	0.		
8-	CBEAM	8	9	8	9	1.	1.	0.		
9-	CBEAM	9	9	9	10	1.	1.	0.		
10-	CBEAM	10	9	10	11	1.	1.	0.		
11-	CBEAM	11	9	11	12	1.	1.	0.		
12-	CBEAM	12	9	12	13	1.	1.	0.		
13-	CBEAM	13	9	13	14	1.	1.	0.		
14-	CBEAM	14	9	14	15	1.	1.	0.		
15-	CBEAM	15	9	15	16	1.	1.	0.		
16-	CBEAM	16	9	16	17	1.	1.	0.		
17-	CBEAM	17	9	17	18	1.	1.	0.		
18-	CBEAM	18	9	18	19	1.	1.	0.		
19-	CBEAM	19	9	19	20	1.	1.	0.		
20-	CBEAM	20	9	20	21	1.	1.	0.		
21-	CBEAM	21	9	21	22	1.	1.	0.		
22-	CBEAM	22	9	22	23	1.	1.	0.		
23-	CBEAM	23	9	23	24	1.	1.	0.		
24-	CBEAM	24	9	24	25	1.	1.	0.		
25-	CBEAM	25	9	25	26	1.	1.	0.		
26-	CBEAM	26	9	26	27	1.	1.	0.		
27-	CBEAM	27	9	27	28	1.	1.	0.		
28-	CBEAM	28	9	28	29	1.	1.	0.		
29-	CBEAM	29	9	29	30	1.	1.	0.		
30-	CBEAM	30	9	30	31	1.	1.	0.		
31-	CBEAM	31	9	31	32	1.	1.	0.		
32-	CBEAM	32	9	32	33	1.	1.	0.		
33-	CBEAM	33	9	33	34	1.	1.	0.		
34-	CBEAM	34	9	34	35	1.	1.	0.		
35-	CBEAM	35	9	35	36	1.	1.	0.		
36-	CBEAM	36	9	36	37	1.	1.	0.		
37-	CBEAM	37	9	37	38	1.	1.	0.		
38-	CBEAM	38	9	38	39	1.	1.	0.		
39-	CBEAM	39	9	39	40	1.	1.	0.		
40-	CBEAM	40	9	40	41	1.	1.	0.		
41-	CBEAM	41	9	41	42	1.	1.	0.		
42-	CBEAM	42	9	42	43	1.	1.	0.		
43-	CBEAM	43	9	43	44	1.	1.	0.		
44-	CBEAM	44	9	44	45	1.	1.	0.		
45-	CBEAM	45	9	45	46	1.	1.	0.		
46-	CBEAM	46	9	46	47	1.	1.	0.		
47-	CBEAM	47	9	47	48	1.	1.	0.		
48-	CBEAM	48	9	48	49	1.	1.	0.		
49-	CBEAM	49	9	49	50	1.	1.	0.		
50-	CBEAM	50	9	50	51	1.	1.	0.		
51-	CBEAM	51	9	51	52	1.	1.	0.		
52-	CBEAM	52	9	52	53	1.	1.	0.		
53-	CBEAM	53	9	53	54	1.	1.	0.		
54-	CBEAM	54	9	54	55	1.	1.	0.		
55-	CBEAM	55	9	55	56	1.	1.	0.		
56-	CBEAM	56	9	56	57	1.	1.	0.		
57-	CBEAM	57	9	57	58	1.	1.	0.		
58-	CBEAM	58	9	58	59	1.	1.	0.		
59-	CBEAM	59	9	59	60	1.	1.	0.		
60-	CBEAM	60	9	60	61	1.	1.	0.		
61-	CBEAM	61	9	61	62	1.	1.	0.		
62-	CBEAM	62	9	62	63	1.	1.	0.		
63-	CBEAM	63	9	63	64	1.	1.	0.		
64-	CBEAM	64	9	64	65	1.	1.	0.		
65-	CBEAM	65	9	65	66	1.	1.	0.		
66-	CBEAM	66	9	66	67	1.	1.	0.		
67-	CBEAM	67	9	67	68	1.	1.	0.		
68-	CBEAM	68	9	68	69	1.	1.	0.		
69-	CBEAM	69	9	69	70	1.	1.	0.		
70-	CBEAM	70	9	70	71	1.	1.	0.		
71-	CBEAM	71	9	71	72	1.	1.	0.		
72-	CBEAM	72	9	72	73	1.	1.	0.		
73-	CBEAM	73	9	73	74	1.	1.	0.		
74-	CBEAM	74	9	74	75	1.	1.	0.		
75-	CBEAM	75	9	75	76	1.	1.	0.		
76-	CBEAM	76	9	76	77	1.	1.	0.		
77-	CBEAM	77	9	77	78	1.	1.	0.		
78-	CBEAM	78	9	78	79	1.	1.	0.		
79-	CBEAM	79	9	79	80	1.	1.	0.		
80-	CBEAM	80	9	80	81	1.	1.	0.		
81-	CBEAM	81	9	81	82	1.	1.	0.		
82-	CBEAM	82	9	82	83	1.	1.	0.		
83-	CBEAM	83	9	83	84	1.	1.	0.		
84-	CBEAM	84	9	84	85	1.	1.	0.		
85-	CBEAM	85	9	85	86	1.	1.	0.		
86-	CBEAM	86	9	86	87	1.	1.	0.		
87-	CBEAM	87	9	87	88	1.	1.	0.		
88-	CBEAM	88	9	88	89	1.	1.	0.		
89-	CBEAM	89	9	89	90	1.	1.	0.		
90-	CBEAM	90	9	90	91	1.	1.	0.		
91-	CBEAM	91	9	91	92	1.	1.	0.		
92-	CBEAM	92	9	92	93	1.	1.	0.		
93-	CBEAM	93	9	93	94	1.	1.	0.		
94-	CBEAM	94	9	94	95	1.	1.	0.		
95-	CBEAM	95	9	95	96	1.	1.	0.		
96-	CBEAM	96	9	96	97	1.	1.	0.		
97-	CBEAM	97	9	97	98	1.	1.	0.		
98-	CBEAM	98	9	98	99	1.	1.	0.		
99-	CBEAM	99	9	99	100	1.	1.	0.		
100-	CBEAM	100	9	100	101	1.	1.	0.		

CARD COUNT	1	2	3	4	5	6	7	8	9	10
101-	CBEAM	101	9	101	102	1	1	0		
102-	CBEAM	102	9	102	103	1	1	0		
103-	CBEAM	103	9	103	104	1	1	0		
104-	CBEAM	104	9	104	105	1	1	0		
105-	CBEAM	105	9	105	106	1	1	0		
106-	CBEAM	106	9	106	107	1	1	0		
107-	CBEAM	107	9	107	108	1	1	0		
108-	CBEAM	108	9	108	109	1	1	0		
109-	CBEAM	109	9	109	110	1	1	0		
110-	CBEAM	110	9	110	111	1	1	0		
111-	CBEAM	111	9	111	112	1	1	0		
112-	CBEAM	112	9	112	113	1	1	0		
113-	CBEAM	113	9	113	114	1	1	0		
114-	CBEAM	114	9	114	115	1	1	0		
115-	CBEAM	115	9	115	116	1	1	0		
116-	CBEAM	116	9	116	117	1	1	0		
117-	CBEAM	117	9	117	118	1	1	0		
118-	CBEAM	118	9	118	119	1	1	0		
119-	CBEAM	119	9	119	120	1	1	0		
120-	CBEAM	120	9	120	121	1	1	0		
121-	CBEAM	121	9	121	122	1	1	0		
122-	CBEAM	122	9	122	123	1	1	0		
123-	CBEAM	123	9	123	124	1	1	0		
124-	CBEAM	124	9	124	125	1	1	0		
125-	CBEAM	125	9	125	126	1	1	0		
126-	CBEAM	126	9	126	127	1	1	0		
127-	CBEAM	127	9	127	128	1	1	0		
128-	CBEAM	128	9	128	129	1	1	0		
129-	CBEAM	129	9	129	130	1	1	0		
130-	CBEAM	130	9	130	131	1	1	0		
131-	GRDSET			130	131	1	1	0		
132-	GRID	1		0	0.0	0		1235		
133-	GRID	2		0	1.0	0				
134-	GRID	3		0	2.0	0				
135-	GRID	4		0	3.0	0				
136-	GRID	5		0	4.0	0				
137-	GRID	6		0	5.0	0				
138-	GRID	7		0	6.0	0				
139-	GRID	8		0	7.0	0				
140-	GRID	9		0	8.0	0				
141-	GRID	10		0	9.0	0				
142-	GRID	11		0	10.0	0				
143-	GRID	12		0	11.0	0				
144-	GRID	13		0	12.0	0				
145-	GRID	14		0	13.0	0				
146-	GRID	15		0	14.0	0				
147-	GRID	16		0	15.0	0				
148-	GRID	17		0	16.0	0				
149-	GRID	18		0	17.0	0				
150-	GRID	19		0	18.0	0				
151-	GRID	20		0	19.0	0				
152-	GRID	21		0	20.0	0				
153-	GRID	22		0	21.0	0				
154-	GRID	23		0	22.0	0				
155-	GRID	24		0	23.0	0				
156-	GRID	25		0	24.0	0				
157-	GRID	26		0	25.0	0				
158-	GRID	27		0	26.0	0				
159-	GRID	28		0	27.0	0				
160-	GRID	29		0	28.0	0				
161-	GRID	30		0	29.0	0				
162-	GRID	31		0	30.0	0				
163-	GRID	32		0	31.0	0				
164-	GRID	33		0	32.0	0				
165-	GRID	34		0	33.0	0				
166-	GRID	35		0	34.0	0				
167-	GRID	36		0	35.0	0				
168-	GRID	37		0	36.0	0				
169-	GRID	38		0	37.0	0				
170-	GRID	39		0	38.0	0				
171-	GRID	40		0	39.0	0				
172-	GRID	41		0	40.0	0		1235		
173-	GRID	42		0	41.0	0				
174-	GRID	43		0	42.0	0				
175-	GRID	44		0	43.0	0				
176-	GRID	45		0	44.0	0				
177-	GRID	46		0	45.0	0				
178-	GRID	47		0	46.0	0				
179-	GRID	48		0	47.0	0				
180-	GRID	49		0	48.0	0				
181-	GRID	50		0	49.0	0				
182-	GRID	51		0	50.0	0				
183-	GRID	52		0	51.0	0				
184-	GRID	53		0	52.0	0				
185-	GRID	54		0	53.0	0				
186-	GRID	55		0	54.0	0				
187-	GRID	56		0	55.0	0				
188-	GRID	57		0	56.0	0				
189-	GRID	58		0	57.0	0				
190-	GRID	59		0	58.0	0				
191-	GRID	60		0	59.0	0				
192-	GRID	61		0	60.0	0				
193-	GRID	62		0	61.0	0				
194-	GRID	63		0	62.0	0				
195-	GRID	64		0	63.0	0				
196-	GRID	65		0	64.0	0				
197-	GRID	66		0	65.0	0				
198-	GRID	67		0	66.0	0				
199-	GRID	68		0	67.0	0				
200-	GRID	69		0	68.0	0				

CARD COUNT	1	2	3	4	5	6	7	8	9	10
201-	GRID	70		0.	69.0	0.				
202-	GRID	71		0.	70.0	0.				
203-	GRID	72		0.	71.0	0.				
204-	GRID	73		0.	72.0	0.				
205-	GRID	74		0.	73.0	0.				
206-	GRID	75		0.	74.0	0.				
207-	GRID	76		0.	75.0	0.				
208-	GRID	77		0.	76.0	0.				
209-	GRID	78		0.	77.0	0.				
210-	GRID	79		0.	78.0	0.				
211-	GRID	80		0.	79.	0.				
212-	GRID	81		0.	80.	0.				
213-	GRID	82		0.	81.	0.				
214-	GRID	83		0.	82.	0.				
215-	GRID	84		0.	83.	0.				
216-	GRID	85		0.	84.	0.				
217-	GRID	86		0.	85.	0.				
218-	GRID	87		0.	86.	0.				
219-	GRID	88		0.	87.	0.				
220-	GRID	89		0.	88.	0.				
221-	GRID	90		0.	89.	0.				
222-	GRID	91		0.	90.	0.		1235		
223-	GRID	92		0.	91.	0.				
224-	GRID	93		0.	92.	0.				
225-	GRID	94		0.	93.	0.				
226-	GRID	95		0.	94.	0.				
227-	GRID	96		0.	95.	0.				
228-	GRID	97		0.	96.	0.				
229-	GRID	98		0.	97.	0.				
230-	GRID	99		0.	98.	0.				
231-	GRID	100		0.	99.	0.				
232-	GRID	101		0.	100.	0.				
233-	GRID	102		0.	101.	0.				
234-	GRID	103		0.	102.	0.				
235-	GRID	104		0.	103.	0.				
236-	GRID	105		0.	104.	0.				
237-	GRID	106		0.	105.	0.				
238-	GRID	107		0.	106.	0.				
239-	GRID	108		0.	107.	0.				
240-	GRID	109		0.	108.	0.				
241-	GRID	110		0.	109.	0.				
242-	GRID	111		0.	110.	0.				
243-	GRID	112		0.	111.	0.				
244-	GRID	113		0.	112.	0.				
245-	GRID	114		0.	113.	0.				
246-	GRID	115		0.	114.	0.				
247-	GRID	116		0.	115.	0.				
248-	GRID	117		0.	116.	0.				
249-	GRID	118		0.	117.	0.				
250-	GRID	119		0.	118.	0.				
251-	GRID	120		0.	119.	0.				
252-	GRID	121		0.	120.	0.				
253-	GRID	122		0.	121.	0.				
254-	GRID	123		0.	122.	0.				
255-	GRID	124		0.	123.	0.				
256-	GRID	125		0.	124.	0.				
257-	GRID	126		0.	125.	0.				
258-	GRID	127		0.	126.	0.				
259-	GRID	128		0.	127.	0.				
260-	GRID	129		0.	128.	0.				
261-	GRID	130		0.	129.	0.				
262-	GRID	131		0.	130.	0.		1235		
263-	BEAM	19	4.32E+6	0.	0.	0.				
264-	PLOAD1	9	19	.241	.2845	9.02E-03		2.55E-04		
265-	PLOAD1	100	1	FZ	LE	0.	-1.25	1.0	-1.25	
266-	PLOAD1	100	2	FZ	LE	0.	-1.25	1.0	-1.25	
267-	PLOAD1	100	3	FZ	LE	0.	-1.25	1.0	-1.25	
268-	PLOAD1	100	4	FZ	LE	0.	-1.25	1.0	-1.25	
269-	PLOAD1	100	5	FZ	LE	0.	-1.25	1.0	-1.25	
270-	PLOAD1	100	6	FZ	LE	0.	-1.25	1.0	-1.25	
271-	PLOAD1	100	7	FZ	LE	0.	-1.25	1.0	-1.25	
272-	PLOAD1	100	8	FZ	LE	0.	-1.25	1.0	-1.25	
273-	PLOAD1	100	9	FZ	LE	0.	-1.25	1.0	-1.25	
274-	PLOAD1	100	10	FZ	LE	0.	-1.25	1.0	-1.25	
275-	PLOAD1	100	11	FZ	LE	0.	-1.25	1.0	-1.25	
276-	PLOAD1	100	12	FZ	LE	0.	-1.25	1.0	-1.25	
277-	PLOAD1	100	13	FZ	LE	0.	-1.25	1.0	-1.25	
278-	PLOAD1	100	14	FZ	LE	0.	-1.25	1.0	-1.25	
279-	PLOAD1	100	15	FZ	LE	0.	-1.25	1.0	-1.25	
280-	PLOAD1	100	16	FZ	LE	0.	-1.25	1.0	-1.25	
281-	PLOAD1	100	17	FZ	LE	0.	-1.25	1.0	-1.25	
282-	PLOAD1	100	18	FZ	LE	0.	-1.25	1.0	-1.25	
283-	PLOAD1	100	19	FZ	LE	0.	-1.25	1.0	-1.25	
284-	PLOAD1	100	20	FZ	LE	0.	-1.25	1.0	-1.25	
285-	PLOAD1	100	21	FZ	LE	0.	-1.25	1.0	-1.25	
286-	PLOAD1	100	22	FZ	LE	0.	-1.25	1.0	-1.25	
287-	PLOAD1	100	23	FZ	LE	0.	-1.25	1.0	-1.25	
288-	PLOAD1	100	24	FZ	LE	0.	-1.25	1.0	-1.25	
289-	PLOAD1	100	25	FZ	LE	0.	-1.25	1.0	-1.25	
290-	PLOAD1	100	26	FZ	LE	0.	-1.25	1.0	-1.25	
291-	PLOAD1	100	27	FZ	LE	0.	-1.25	1.0	-1.25	
292-	PLOAD1	100	28	FZ	LE	0.	-1.25	1.0	-1.25	
293-	PLOAD1	100	29	FZ	LE	0.	-1.25	1.0	-1.25	
294-	PLOAD1	100	30	FZ	LE	0.	-1.25	1.0	-1.25	
295-	PLOAD1	100	31	FZ	LE	0.	-1.25	1.0	-1.25	
296-	PLOAD1	100	32	FZ	LE	0.	-1.25	1.0	-1.25	
297-	PLOAD1	100	33	FZ	LE	0.	-1.25	1.0	-1.25	
298-	PLOAD1	100	34	FZ	LE	0.	-1.25	1.0	-1.25	
299-	PLOAD1	100	35	FZ	LE	0.	-1.25	1.0	-1.25	
300-	PLOAD1	100	36	FZ	LE	0.	-1.25	1.0	-1.25	

Input Data for Continuous Horizontal Curved Beam Using
Three-Plate Beam Element Model

NASTRAN EXECUTIVE CONTROL DECK ECHO

ID ARTHIT,WIN25
SOL 24
TIME 20
CEND

CASE CONTROL DECK ECHO

CARD COUNT	
1	TITLE=CURVE BEAM , MPC
	SUBTITLE=131 NODES , USING LINEAR BEAM ELEMENT.
	DISPLACEMENT=ALL
	SPCFORCE=ALL
	ELDFORCE=ALL
6	WT=3
7	LOAD=100
8	BEGIN CULK

INPUT BULK DATA CARD COUNT = 2213

CARD COUNT	1	2	3	4	5	6	7	8	9	10
101-	CB	101	9	101	102	1	1	0		
102-	BEAM	102	9	102	103	1	1	0		
103-	CB	103	9	103	104	1	1	0		
104-	BEAM	104	9	104	105	1	1	0		
105-	CB	105	9	105	106	1	1	0		
106-	BEAM	106	9	106	107	1	1	0		
107-	CB	107	9	107	108	1	1	0		
108-	BEAM	108	9	108	109	1	1	0		
109-	CB	109	9	109	110	1	1	0		
110-	BEAM	110	9	110	111	1	1	0		
111-	CB	111	9	111	112	1	1	0		
112-	BEAM	112	9	112	113	1	1	0		
113-	CB	113	9	113	114	1	1	0		
114-	BEAM	114	9	114	115	1	1	0		
115-	CB	115	9	115	116	1	1	0		
116-	BEAM	116	9	116	117	1	1	0		
117-	CB	117	9	117	118	1	1	0		
118-	BEAM	118	9	118	119	1	1	0		
119-	CB	119	9	119	120	1	1	0		
120-	BEAM	120	9	120	121	1	1	0		
121-	CB	121	9	121	122	1	1	0		
122-	BEAM	122	9	122	123	1	1	0		
123-	CB	123	9	123	124	1	1	0		
124-	BEAM	124	9	124	125	1	1	0		
125-	CB	125	9	125	126	1	1	0		
126-	BEAM	126	9	126	127	1	1	0		
127-	CB	127	9	127	128	1	1	0		
128-	BEAM	128	9	128	129	1	1	0		
129-	CB	129	9	129	130	1	1	0		
130-	BEAM	130	9	130	131	1	1	0		
131-	CB	131	4	135	136	1	1	0		
132-	BEAM	132	4	136	137	1	1	0		
133-	CB	133	4	137	138	1	1	0		
134-	BEAM	134	4	138	139	1	1	0		
135-	CB	135	4	139	140	1	1	0		
136-	BEAM	136	4	140	141	1	1	0		
137-	CB	137	4	141	142	1	1	0		
138-	BEAM	138	4	142	143	1	1	0		
139-	CB	139	4	143	144	1	1	0		
140-	BEAM	140	4	144	145	1	1	0		
141-	CB	141	4	145	146	1	1	0		
142-	BEAM	142	4	146	147	1	1	0		
143-	CB	143	4	147	148	1	1	0		
144-	BEAM	144	4	148	149	1	1	0		
145-	CB	145	4	149	150	1	1	0		
146-	BEAM	146	4	150	151	1	1	0		
147-	CB	147	4	151	152	1	1	0		
148-	BEAM	148	4	152	153	1	1	0		
149-	CB	149	4	153	154	1	1	0		
150-	BEAM	150	4	154	155	1	1	0		
151-	CB	151	4	155	156	1	1	0		
152-	BEAM	152	4	156	157	1	1	0		
153-	CB	153	4	157	158	1	1	0		
154-	BEAM	154	4	158	159	1	1	0		
155-	CB	155	4	159	160	1	1	0		
156-	BEAM	156	4	160	161	1	1	0		
157-	CB	157	4	161	162	1	1	0		
158-	BEAM	158	4	162	163	1	1	0		
159-	CB	159	4	163	164	1	1	0		
160-	BEAM	160	4	164	165	1	1	0		
161-	CB	161	4	165	166	1	1	0		
162-	BEAM	162	4	166	167	1	1	0		
163-	CB	163	4	167	168	1	1	0		
164-	BEAM	164	4	168	169	1	1	0		
165-	CB	165	4	169	170	1	1	0		
166-	BEAM	166	4	170	171	1	1	0		
167-	CB	167	4	171	172	1	1	0		
168-	BEAM	168	4	172	173	1	1	0		
169-	CB	169	4	173	174	1	1	0		
170-	BEAM	170	4	174	175	1	1	0		
171-	CB	171	4	175	176	1	1	0		
172-	BEAM	172	4	176	177	1	1	0		
173-	CB	173	4	177	178	1	1	0		
174-	BEAM	174	4	178	179	1	1	0		
175-	CB	175	4	179	180	1	1	0		
176-	BEAM	176	4	180	181	1	1	0		
177-	CB	177	4	181	182	1	1	0		
178-	BEAM	178	4	182	183	1	1	0		
179-	CB	179	4	183	184	1	1	0		
180-	BEAM	180	4	184	185	1	1	0		
181-	CB	181	4	185	186	1	1	0		
182-	BEAM	182	4	186	187	1	1	0		
183-	CB	183	4	187	188	1	1	0		
184-	BEAM	184	4	188	189	1	1	0		
185-	CB	185	4	189	190	1	1	0		
186-	BEAM	186	4	190	191	1	1	0		
187-	CB	187	4	191	192	1	1	0		
188-	BEAM	188	4	192	193	1	1	0		
189-	CB	189	4	193	194	1	1	0		
190-	BEAM	190	4	194	195	1	1	0		
191-	CB	191	4	195	196	1	1	0		
192-	BEAM	192	4	196	197	1	1	0		
193-	CB	193	4	197	198	1	1	0		
194-	BEAM	194	4	198	199	1	1	0		
195-	CB	195	4	199	200	1	1	0		
196-	CREAM	196	4	200	201	1	1	0		
197-	CB	197	4	201	202	1	1	0		
198-	BEAM	198	4	202	203	1	1	0		
199-	CB	199	4	203	204	1	1	0		
200-	BEAM	200	4	204	205	1	1	0		

CARD COUNT	1	2	3	4	5	6	7	8	9	10
201-	CBEAM	201	4	205	206	1.	1.	0.		
202-	CBEAM	202	4	206	207	1.	1.	0.		
203-	CBEAM	203	4	207	208	1.	1.	0.		
204-	CBEAM	204	4	208	209	1.	1.	0.		
205-	CBEAM	205	4	209	210	1.	1.	0.		
206-	CBEAM	206	4	210	211	1.	1.	0.		
207-	CBEAM	207	4	211	212	1.	1.	0.		
208-	CBEAM	208	4	212	213	1.	1.	0.		
209-	CBEAM	209	4	213	214	1.	1.	0.		
210-	CBEAM	210	4	214	215	1.	1.	0.		
211-	CBEAM	211	4	215	216	1.	1.	0.		
212-	CBEAM	212	4	216	217	1.	1.	0.		
213-	CBEAM	213	4	217	218	1.	1.	0.		
214-	CBEAM	214	4	218	219	1.	1.	0.		
215-	CBEAM	215	4	219	220	1.	1.	0.		
216-	CBEAM	216	4	220	221	1.	1.	0.		
217-	CBEAM	217	4	221	222	1.	1.	0.		
218-	CBEAM	218	4	222	223	1.	1.	0.		
219-	CBEAM	219	4	223	224	1.	1.	0.		
220-	CBEAM	220	4	224	225	1.	1.	0.		
221-	CBEAM	221	4	225	226	1.	1.	0.		
222-	CBEAM	222	4	226	227	1.	1.	0.		
223-	CBEAM	223	4	227	228	1.	1.	0.		
224-	CBEAM	224	4	228	229	1.	1.	0.		
225-	CBEAM	225	4	229	230	1.	1.	0.		
226-	CBEAM	226	4	230	231	1.	1.	0.		
227-	CBEAM	227	4	231	232	1.	1.	0.		
228-	CBEAM	228	4	232	233	1.	1.	0.		
229-	CBEAM	229	4	233	234	1.	1.	0.		
230-	CBEAM	230	4	234	235	1.	1.	0.		
231-	CBEAM	231	4	235	236	1.	1.	0.		
232-	CBEAM	232	4	236	237	1.	1.	0.		
233-	CBEAM	233	4	237	238	1.	1.	0.		
234-	CBEAM	234	4	238	239	1.	1.	0.		
235-	CBEAM	235	4	239	240	1.	1.	0.		
236-	CBEAM	236	4	240	241	1.	1.	0.		
237-	CBEAM	237	4	241	242	1.	1.	0.		
238-	CBEAM	238	4	242	243	1.	1.	0.		
239-	CBEAM	239	4	243	244	1.	1.	0.		
240-	CBEAM	240	4	244	245	1.	1.	0.		
241-	CBEAM	241	4	245	246	1.	1.	0.		
242-	CBEAM	242	4	246	247	1.	1.	0.		
243-	CBEAM	243	4	247	248	1.	1.	0.		
244-	CBEAM	244	4	248	249	1.	1.	0.		
245-	CBEAM	245	4	249	250	1.	1.	0.		
246-	CBEAM	246	4	250	251	1.	1.	0.		
247-	CBEAM	247	4	251	252	1.	1.	0.		
248-	CBEAM	248	4	252	253	1.	1.	0.		
249-	CBEAM	249	4	253	254	1.	1.	0.		
250-	CHEAP	250	4	254	255	1.	1.	0.		
251-	CBEAM	251	4	255	256	1.	1.	0.		
252-	CBEAM	252	4	256	257	1.	1.	0.		
253-	CBEAM	253	4	257	258	1.	1.	0.		
254-	CBEAM	254	4	258	259	1.	1.	0.		
255-	CBEAM	255	4	259	260	1.	1.	0.		
256-	CBEAM	256	4	260	261	1.	1.	0.		
257-	CBEAM	257	4	261	262	1.	1.	0.		
258-	CBEAM	258	4	262	263	1.	1.	0.		
259-	CBEAM	259	4	263	264	1.	1.	0.		
260-	CBEAM	260	4	264	265	1.	1.	0.		
261-	CBEAM	261	4	265	266	1.	1.	0.		
262-	CBEAM	262	4	266	267	1.	1.	0.		
263-	CBEAM	263	4	267	268	1.	1.	0.		
264-	CBEAM	264	4	268	269	1.	1.	0.		
265-	CBEAM	265	4	269	270	1.	1.	0.		
266-	CBEAM	266	4	270	271	1.	1.	0.		
267-	CBEAM	267	4	271	272	1.	1.	0.		
268-	CBEAM	268	4	272	273	1.	1.	0.		
269-	CBEAM	269	4	273	274	1.	1.	0.		
270-	CBEAM	270	4	274	275	1.	1.	0.		
271-	CBEAM	271	4	275	276	1.	1.	0.		
272-	CBEAM	272	4	276	277	1.	1.	0.		
273-	CBEAM	273	4	277	278	1.	1.	0.		
274-	CBEAM	274	4	278	279	1.	1.	0.		
275-	CBEAM	275	4	279	280	1.	1.	0.		
276-	CBEAM	276	4	280	281	1.	1.	0.		
277-	CBEAM	277	4	281	282	1.	1.	0.		
278-	CBEAM	278	4	282	283	1.	1.	0.		
279-	CBEAM	279	4	283	284	1.	1.	0.		
280-	CBEAM	280	4	284	285	1.	1.	0.		
281-	CBEAM	281	4	285	286	1.	1.	0.		
282-	CBEAM	282	4	286	287	1.	1.	0.		
283-	CBEAM	283	4	287	288	1.	1.	0.		
284-	CBEAM	284	4	288	289	1.	1.	0.		
285-	CBEAM	285	4	289	290	1.	1.	0.		
286-	CBEAM	286	4	290	291	1.	1.	0.		
287-	CBEAM	287	4	291	292	1.	1.	0.		
288-	CBEAM	288	4	292	293	1.	1.	0.		
289-	CBEAM	289	4	293	294	1.	1.	0.		
290-	CHEAP	290	4	294	295	1.	1.	0.		
291-	CBEAM	291	4	295	296	1.	1.	0.		
292-	CBEAM	292	4	296	297	1.	1.	0.		
293-	CBEAM	293	4	297	298	1.	1.	0.		
294-	CBEAM	294	4	298	299	1.	1.	0.		
295-	CBEAM	295	4	299	300	1.	1.	0.		
296-	CBEAM	296	4	300	301	1.	1.	0.		
297-	CBEAM	297	4	301	302	1.	1.	0.		
298-	CBEAM	298	4	302	303	1.	1.	0.		
299-	CBEAM	299	4	303	304	1.	1.	0.		
300-	CBEAM	300	4	304	305	1.	1.	0.		
				305	306	1.	1.	0.		

CARD COUNT	1	2	3	4	5	6	7	8	9	10
301-	CBEAM	301	4	306	307	1.	1.	0.		
302-	CBEAM	302	4	307	308	1.	1.	0.		
303-	CBEAM	303	4	308	309	1.	1.	0.		
304-	CBEAM	304	4	309	310	1.	1.	0.		
305-	CBEAM	305	4	310	311	1.	1.	0.		
306-	CBEAM	306	4	311	312	1.	1.	0.		
307-	CBEAM	307	4	312	313	1.	1.	0.		
308-	CBEAM	308	4	313	314	1.	1.	0.		
309-	CBEAM	309	4	314	315	1.	1.	0.		
310-	CBEAM	310	4	315	316	1.	1.	0.		
311-	CBEAM	311	4	316	317	1.	1.	0.		
312-	CBEAM	312	4	317	318	1.	1.	0.		
313-	CBEAM	313	4	318	319	1.	1.	0.		
314-	CBEAM	314	4	319	320	1.	1.	0.		
315-	CBEAM	315	4	320	321	1.	1.	0.		
316-	CBEAM	316	4	321	322	1.	1.	0.		
317-	CBEAM	317	4	322	323	1.	1.	0.		
318-	CBEAM	318	4	323	324	1.	1.	0.		
319-	CBEAM	319	4	324	325	1.	1.	0.		
320-	CBEAM	320	4	325	326	1.	1.	0.		
321-	CBEAM	321	4	326	327	1.	1.	0.		
322-	CBEAM	322	4	327	328	1.	1.	0.		
323-	CBEAM	323	4	328	329	1.	1.	0.		
324-	CBEAM	324	4	329	330	1.	1.	0.		
325-	CBEAM	325	4	330	331	1.	1.	0.		
326-	CBEAM	326	4	331	332	1.	1.	0.		
327-	CBEAM	327	4	332	333	1.	1.	0.		
328-	CBEAM	328	4	333	334	1.	1.	0.		
329-	CBEAM	329	4	334	335	1.	1.	0.		
330-	CBEAM	330	4	335	336	1.	1.	0.		
331-	CBEAM	331	4	336	337	1.	1.	0.		
332-	CBEAM	332	4	337	338	1.	1.	0.		
333-	CBEAM	333	4	338	339	1.	1.	0.		
334-	CBEAM	334	4	339	340	1.	1.	0.		
335-	CBEAM	335	4	340	341	1.	1.	0.		
336-	CBEAM	336	4	341	342	1.	1.	0.		
337-	CBEAM	337	4	342	343	1.	1.	0.		
338-	CBEAM	338	4	343	344	1.	1.	0.		
339-	CBEAM	339	4	344	345	1.	1.	0.		
340-	CBEAM	340	4	345	346	1.	1.	0.		
341-	CBEAM	341	4	346	347	1.	1.	0.		
342-	CBEAM	342	4	347	348	1.	1.	0.		
343-	CBEAM	343	4	348	349	1.	1.	0.		
344-	CBEAM	344	4	349	350	1.	1.	0.		
345-	CBEAM	345	4	350	351	1.	1.	0.		
346-	CBEAM	346	4	351	352	1.	1.	0.		
347-	CBEAM	347	4	352	353	1.	1.	0.		
348-	CBEAM	348	4	353	354	1.	1.	0.		
349-	CBEAM	349	4	354	355	1.	1.	0.		
350-	CBEAM	350	4	355	356	1.	1.	0.		
351-	CBEAM	351	4	356	357	1.	1.	0.		
352-	CBEAM	352	4	357	358	1.	1.	0.		
353-	CBEAM	353	4	358	359	1.	1.	0.		
354-	CBEAM	354	4	359	360	1.	1.	0.		
355-	CBEAM	355	4	360	361	1.	1.	0.		
356-	CBEAM	356	4	361	362	1.	1.	0.		
357-	CBEAM	357	4	362	363	1.	1.	0.		
358-	CBEAM	358	4	363	364	1.	1.	0.		
359-	CBEAM	359	4	364	365	1.	1.	0.		
360-	CBEAM	360	4	365	366	1.	1.	0.		
361-	CBEAM	361	4	366	367	1.	1.	0.		
362-	CBEAM	362	4	367	368	1.	1.	0.		
363-	CBEAM	363	4	368	369	1.	1.	0.		
364-	CBEAM	364	4	369	370	1.	1.	0.		
365-	CBEAM	365	4	370	371	1.	1.	0.		
366-	CBEAM	366	4	371	372	1.	1.	0.		
367-	CBEAM	367	4	372	373	1.	1.	0.		
368-	CBEAM	368	4	373	374	1.	1.	0.		
369-	CBEAM	369	4	374	375	1.	1.	0.		
370-	CBEAM	370	4	375	376	1.	1.	0.		
371-	CBEAM	371	4	376	377	1.	1.	0.		
372-	CBEAM	372	4	377	378	1.	1.	0.		
373-	CBEAM	373	4	378	379	1.	1.	0.		
374-	CBEAM	374	4	379	380	1.	1.	0.		
375-	CBEAM	375	4	380	381	1.	1.	0.		
376-	CBEAM	376	4	381	382	1.	1.	0.		
377-	CBEAM	377	4	382	383	1.	1.	0.		
378-	CBEAM	378	4	383	384	1.	1.	0.		
379-	CBEAM	379	4	384	385	1.	1.	0.		
380-	CBEAM	380	4	385	386	1.	1.	0.		
381-	CBEAM	381	4	386	387	1.	1.	0.		
382-	CBEAM	382	4	387	388	1.	1.	0.		
383-	CBEAM	383	4	388	389	1.	1.	0.		
384-	CBEAM	384	4	389	390	1.	1.	0.		
385-	CBEAM	385	4	390	391	1.	1.	0.		
386-	CBEAM	386	4	391	392	1.	1.	0.		
387-	CBEAM	387	4	392	393	1.	1.	0.		
388-	CBEAM	388	4	393	394	1.	1.	0.		
389-	CBEAM	389	4	394	395	1.	1.	0.		
390-	CBEAM	390	4	395	396	1.	1.	0.		
391-	CORD1	33	132	133	134					
392-	CORD1	33	132	133	41					
393-	CORD1	33	132	133	31					
394-	CORD1	23	132	133	131					
395-	GRID	1	33	455.74		1.3692		1235		
396-	GRID	2	33	455.74	.12572031	3692				
397-	GRID	3	33	455.74	.25144061	3692				
398-	GRID	4	33	455.74	.37716091	3692				
399-	GRID	5	33	455.74	.50288131	3692				
400-	GFID	6	33	455.74	.62860161	3692				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
401-	GRID	7	33	455.74	7.75432191	36.92				
402-	GRID	8	33	455.74	8.8004221	36.92				
403-	GRID	9	33	455.74	1.0057621	36.92				
404-	GRID	10	33	455.74	1.1314831	36.92				
405-	GRID	11	33	455.74	1.2572031	36.92				
406-	GRID	12	33	455.74	1.3829241	36.92				
407-	GRID	13	33	455.74	1.5086441	36.92				
408-	GRID	14	33	455.74	1.6343641	36.92				
409-	GRID	15	33	455.74	1.7600841	36.92				
410-	GRID	16	33	455.74	1.8858051	36.92				
411-	GRID	17	33	455.74	2.0115251	36.92				
412-	GRID	18	33	455.74	2.1372451	36.92				
413-	GRID	19	33	455.74	2.2629651	36.92				
414-	GRID	20	33	455.74	2.3886851	36.92				
415-	GRID	21	33	455.74	2.5144051	36.92				
416-	GRID	22	33	455.74	2.6401251	36.92				
417-	GRID	23	33	455.74	2.7658451	36.92				
418-	GRID	24	33	455.74	2.8915651	36.92				
419-	GRID	25	33	455.74	3.0172851	36.92				
420-	GRID	26	33	455.74	3.1430051	36.92				
421-	GRID	27	33	455.74	3.2687251	36.92				
422-	GRID	28	33	455.74	3.3944451	36.92				
423-	GRID	29	33	455.74	3.5201651	36.92				
424-	GRID	30	33	455.74	3.6458851	36.92				
425-	GRID	31	33	455.74	3.7716051	36.92				
426-	GRID	32	33	455.74	3.8973251	36.92				
427-	GRID	33	33	455.74	4.0230451	36.92				
428-	GRID	34	33	455.74	4.1487651	36.92				
429-	GRID	35	33	455.74	4.2744851	36.92				
430-	GRID	36	33	455.74	4.4002051	36.92				
431-	GRID	37	33	455.74	4.5259251	36.92				
432-	GRID	38	33	455.74	4.6516451	36.92				
433-	GRID	39	33	455.74	4.7773651	36.92				
434-	GRID	40	33	455.74	4.9030851	36.92				
435-	GRID	41	33	455.74	5.0288051	36.92				
436-	GRID	42	33	455.74	5.1545251	36.92				
437-	GRID	43	33	455.74	5.2802451	36.92				
438-	GRID	44	33	455.74	5.4059651	36.92				
439-	GRID	45	33	455.74	5.5316851	36.92				
440-	GRID	46	33	455.74	5.6574051	36.92				
441-	GRID	47	33	455.74	5.7831251	36.92				
442-	GRID	48	33	455.74	5.9088451	36.92				
443-	GRID	49	33	455.74	6.0345651	36.92				
444-	GRID	50	33	455.74	6.1602851	36.92				
445-	GRID	51	33	455.74	6.2860051	36.92				
446-	GRID	52	33	455.74	6.4117251	36.92				
447-	GRID	53	33	455.74	6.5374451	36.92				
448-	GRID	54	33	455.74	6.6631651	36.92				
449-	GRID	55	33	455.74	6.7888851	36.92				
450-	GRID	56	33	455.74	6.9146051	36.92				
451-	GRID	57	33	455.74	7.0403251	36.92				
452-	GRID	58	33	455.74	7.1660451	36.92				
453-	GRID	59	33	455.74	7.2917651	36.92				
454-	GRID	60	33	455.74	7.4174851	36.92				
455-	GRID	61	33	455.74	7.5432051	36.92				
456-	GRID	62	33	455.74	7.6689251	36.92				
457-	GRID	63	33	455.74	7.7946451	36.92				
458-	GRID	64	33	455.74	7.9203651	36.92				
459-	GRID	65	33	455.74	8.0460851	36.92				
460-	GRID	66	33	455.74	8.1718051	36.92				
461-	GRID	67	33	455.74	8.2975251	36.92				
462-	GRID	68	33	455.74	8.4232451	36.92				
463-	GRID	69	33	455.74	8.5489651	36.92				
464-	GRID	70	33	455.74	8.6746851	36.92				
465-	GRID	71	33	455.74	8.8004051	36.92				
466-	GRID	72	33	455.74	8.9261251	36.92				
467-	GRID	73	33	455.74	9.0518451	36.92				
468-	GRID	74	33	455.74	9.1775651	36.92				
469-	GRID	75	33	455.74	9.3032851	36.92				
470-	GRID	76	33	455.74	9.4290051	36.92				
471-	GRID	77	33	455.74	9.5547251	36.92				
472-	GRID	78	33	455.74	9.6804451	36.92				
473-	GRID	79	33	455.74	9.8061651	36.92				
474-	GRID	80	33	455.74	9.9318851	36.92				
475-	GRID	81	33	455.74	10.0576051	36.92				
476-	GRID	82	33	455.74	10.1833251	36.92				
477-	GRID	83	33	455.74	10.3090451	36.92				
478-	GRID	84	33	455.74	10.4347651	36.92				
479-	GRID	85	33	455.74	10.5604851	36.92				
480-	GRID	86	33	455.74	10.6862051	36.92				
481-	GRID	87	33	455.74	10.8119251	36.92				
482-	GRID	88	33	455.74	10.9376451	36.92				
483-	GRID	89	33	455.74	11.0633651	36.92				
484-	GRID	90	33	455.74	11.1890851	36.92				
485-	GRID	91	33	455.74	11.3148051	36.92				
486-	GRID	92	33	455.74	11.4405251	36.92				
487-	GRID	93	33	455.74	11.5662451	36.92				
488-	GRID	94	33	455.74	11.6919651	36.92				
489-	GRID	95	33	455.74	11.8176851	36.92				
490-	GRID	96	33	455.74	11.9434051	36.92				
491-	GRID	97	33	455.74	12.0691251	36.92				
492-	GRID	98	33	455.74	12.1948451	36.92				
493-	GRID	99	33	455.74	12.3205651	36.92				
494-	GRID	100	33	455.74	12.4462851	36.92				
495-	GRID	101	33	455.74	12.5720051	36.92				
496-	GRID	102	33	455.74	12.6977251	36.92				
497-	GRID	103	33	455.74	12.8234451	36.92				
498-	GRID	104	33	455.74	12.9491651	36.92				
499-	GRID	105	33	455.74	13.0748851	36.92				
500-	GRID	106	33	455.74	13.2006051	36.92				

3 1235

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CARD COUNT	1	2	3	4	5	6	7	8	9	10
501-	GRID	107	33	455.74	13.326351	3692				
502-	GRID	108	33	455.74	13.452071	3692				
503-	GRID	109	33	455.74	13.577901	3692				
504-	GRID	110	33	455.74	13.703521	3692				
505-	GRID	111	33	455.74	13.829241	3692				
506-	GRID	112	33	455.74	13.954961	3692				
507-	GRID	113	33	455.74	14.080681	3692				
508-	GRID	114	33	455.74	14.206401	3692				
509-	GRID	115	33	455.74	14.332121	3692				
510-	GRID	116	33	455.74	14.457841	3692				
511-	GRID	117	33	455.74	14.583561	3692				
512-	GRID	118	33	455.74	14.709281	3692				
513-	GRID	119	33	455.74	14.835001	3692				
514-	GRID	120	33	455.74	14.960721	3692				
515-	GRID	121	33	455.74	15.086441	3692				
516-	GRID	122	33	455.74	15.212161	3692				
517-	GRID	123	33	455.74	15.337881	3692				
518-	GRID	124	33	455.74	15.463601	3692				
519-	GRID	125	33	455.74	15.589321	3692				
520-	GRID	126	33	455.74	15.715041	3692				
521-	GRID	127	33	455.74	15.840761	3692				
522-	GRID	128	33	455.74	15.966481	3692				
523-	GRID	129	33	455.74	16.092201	3692				
524-	GRID	130	33	455.74	16.217921	3692				
525-	GRID	131	33	455.74	16.343641	3692	23			1235
526-	GRID	132		0.	0.	0.				123456
527-	GRID	133		0.	0.	1.				123456
528-	GRID	134		1.	0.	1.				123456
529-	GRID	135		455.74	0.	2.				1235
530-	GRID	136	33	455.74	1.257202	7075				
531-	GRID	137	33	455.74	1.382922	7075				
532-	GRID	138	33	455.74	1.508642	7075				
533-	GRID	139	33	455.74	1.634362	7075				
534-	GRID	140	33	455.74	1.760082	7075				
535-	GRID	141	33	455.74	1.885802	7075				
536-	GRID	142	33	455.74	2.011522	7075				
537-	GRID	143	33	455.74	2.137242	7075				
538-	GRID	144	33	455.74	2.262962	7075				
539-	GRID	145	33	455.74	2.388682	7075				
540-	GRID	146	33	455.74	2.514402	7075				
541-	GRID	147	33	455.74	2.640122	7075				
542-	GRID	148	33	455.74	2.765842	7075				
543-	GRID	149	33	455.74	2.891562	7075				
544-	GRID	150	33	455.74	3.017282	7075				
545-	GRID	151	33	455.74	3.143002	7075				
546-	GRID	152	33	455.74	3.268722	7075				
547-	GRID	153	33	455.74	3.394442	7075				
548-	GRID	154	33	455.74	3.520162	7075				
549-	GRID	155	33	455.74	3.645882	7075				
550-	GRID	156	33	455.74	3.771602	7075				
551-	GRID	157	33	455.74	3.897322	7075				
552-	GRID	158	33	455.74	4.023042	7075				
553-	GRID	159	33	455.74	4.148762	7075				
554-	GRID	160	33	455.74	4.274482	7075				
555-	GRID	161	33	455.74	4.400202	7075				
556-	GRID	162	33	455.74	4.525922	7075				
557-	GRID	163	33	455.74	4.651642	7075				
558-	GRID	164	33	455.74	4.777362	7075				
559-	GRID	165	33	455.74	4.903082	7075				
560-	GRID	166	33	455.74	5.028802	7075				
561-	GRID	167	33	455.74	5.154522	7075				
562-	GRID	168	33	455.74	5.280242	7075				
563-	GRID	169	33	455.74	5.405962	7075				
564-	GRID	170	33	455.74	5.531682	7075				
565-	GRID	171	33	455.74	5.657402	7075				
566-	GRID	172	33	455.74	5.783122	7075				
567-	GRID	173	33	455.74	5.908842	7075				
568-	GRID	174	33	455.74	6.034562	7075				
569-	GRID	175	33	455.74	6.160282	7075				
570-	GRID	176	33	455.74	6.286002	7075				
571-	GRID	177	33	455.74	6.411722	7075				
572-	GRID	178	33	455.74	6.537442	7075				
573-	GRID	179	33	455.74	6.663162	7075				
574-	GRID	180	33	455.74	6.788882	7075				
575-	GRID	181	33	455.74	6.914602	7075				
576-	GRID	182	33	455.74	7.040322	7075				
577-	GRID	183	33	455.74	7.166042	7075				
578-	GRID	184	33	455.74	7.291762	7075				
579-	GRID	185	33	455.74	7.417482	7075				
580-	GRID	186	33	455.74	7.543202	7075				
581-	GRID	187	33	455.74	7.668922	7075				
582-	GRID	188	33	455.74	7.794642	7075				
583-	GRID	189	33	455.74	7.920362	7075				
584-	GRID	190	33	455.74	8.046082	7075				
585-	GRID	191	33	455.74	8.171802	7075				
586-	GRID	192	33	455.74	8.297522	7075				
587-	GRID	193	33	455.74	8.423242	7075				
588-	GRID	194	33	455.74	8.548962	7075				
589-	GRID	195	33	455.74	8.674682	7075				
590-	GRID	196	33	455.74	8.800402	7075				
591-	GRID	197	33	455.74	8.926122	7075				
592-	GRID	198	33	455.74	9.051842	7075				
593-	GRID	199	33	455.74	9.177562	7075				
594-	GRID	200	33	455.74	9.303282	7075				
595-	GRID	201	33	455.74	9.429002	7075				
596-	GRID	202	33	455.74	9.554722	7075				
597-	GRID	203	33	455.74	9.680442	7075				
598-	GRID	204	33	455.74	9.806162	7075				
599-	GRID	205	33	455.74	9.931882	7075				
600-	GRID	206	33	455.74	10.057602	7075				

CARD COUNT	1	2	3	4	5	6	7	8	9	10
601-	GRID	207	33	455.74	9.0518632	7075				
602-	GRID	208	33	455.74	9.1775842	7075				
603-	GRID	209	33	455.74	9.3033042	7075				
604-	GRID	210	33	455.74	9.4290242	7075				
605-	GRID	211	33	455.74	9.5547442	7075				
606-	GRID	212	33	455.74	9.6804642	7075				
607-	GRID	213	33	455.74	9.8061842	7075				
608-	GRID	214	33	455.74	9.9319042	7075				
609-	GRID	215	33	455.74	10.0576242	7075				
610-	GRID	216	33	455.74	10.1833442	7075				
611-	GRID	217	33	455.74	10.3090642	7075				
612-	GRID	218	33	455.74	10.4347842	7075				
613-	GRID	219	33	455.74	10.5605042	7075				
614-	GRID	220	33	455.74	10.6862242	7075				
615-	GRID	221	33	455.74	10.8119442	7075				
616-	GRID	222	33	455.74	10.9376642	7075				
617-	GRID	223	33	455.74	11.0633842	7075				
618-	GRID	224	33	455.74	11.1891042	7075				
619-	GRID	225	33	455.74	11.3148242	7075	13	1235		
620-	GRID	226	33	455.74	11.4405442	7075				
621-	GRID	227	33	455.74	11.5662642	7075				
622-	GRID	228	33	455.74	11.6919842	7075				
623-	GRID	229	33	455.74	11.8177042	7075				
624-	GRID	230	33	455.74	11.9434242	7075				
625-	GRID	231	33	455.74	12.0691442	7075				
626-	GRID	232	33	455.74	12.1948642	7075				
627-	GRID	233	33	455.74	12.3205842	7075				
628-	GRID	234	33	455.74	12.4463042	7075				
629-	GRID	235	33	455.74	12.5720242	7075				
630-	GRID	236	33	455.74	12.6977442	7075				
631-	GRID	237	33	455.74	12.8234642	7075				
632-	GRID	238	33	455.74	12.9491842	7075				
633-	GRID	239	33	455.74	13.0749042	7075				
634-	GRID	240	33	455.74	13.2006242	7075				
635-	GRID	241	33	455.74	13.3263442	7075				
636-	GRID	242	33	455.74	13.4520642	7075				
637-	GRID	243	33	455.74	13.5777842	7075				
638-	GRID	244	33	455.74	13.7035042	7075				
639-	GRID	245	33	455.74	13.8292242	7075				
640-	GRID	246	33	455.74	13.9549442	7075				
641-	GRID	247	33	455.74	14.0806642	7075				
642-	GRID	248	33	455.74	14.2063842	7075				
643-	GRID	249	33	455.74	14.3321042	7075				
644-	GRID	250	33	455.74	14.4578242	7075				
645-	GRID	251	33	455.74	14.5835442	7075				
646-	GRID	252	33	455.74	14.7092642	7075				
647-	GRID	253	33	455.74	14.8349842	7075				
648-	GRID	254	33	455.74	14.9607042	7075				
649-	GRID	255	33	455.74	15.0864242	7075				
650-	GRID	256	33	455.74	15.2121442	7075				
651-	GRID	257	33	455.74	15.3378642	7075				
652-	GRID	258	33	455.74	15.4635842	7075				
653-	GRID	259	33	455.74	15.5893042	7075				
654-	GRID	260	33	455.74	15.7150242	7075				
655-	GRID	261	33	455.74	15.8407442	7075				
656-	GRID	262	33	455.74	15.9664642	7075				
657-	GRID	263	33	455.74	16.0921842	7075				
658-	GRID	264	33	455.74	16.2179042	7075				
659-	GRID	265	33	455.74	16.3436242	7075	21	1235		
660-	GRID	266	33	455.74	0.0000000	03085				
661-	GRID	267	33	455.74	1.2572030	03085				
662-	GRID	268	33	455.74	2.5144060	03085				
663-	GRID	269	33	455.74	3.7716090	03085				
664-	GRID	270	33	455.74	5.0288120	03085				
665-	GRID	271	33	455.74	6.2860150	03085				
666-	GRID	272	33	455.74	7.5432180	03085				
667-	GRID	273	33	455.74	8.8004210	03085				
668-	GRID	274	33	455.74	10.0576240	03085				
669-	GRID	275	33	455.74	11.3148270	03085				
670-	GRID	276	33	455.74	12.5720300	03085				
671-	GRID	277	33	455.74	13.8292330	03085				
672-	GRID	278	33	455.74	15.0864360	03085				
673-	GRID	279	33	455.74	16.3436390	03085				
674-	GRID	280	33	455.74	17.6008420	03085				
675-	GRID	281	33	455.74	18.8580450	03085				
676-	GRID	282	33	455.74	20.1152480	03085				
677-	GRID	283	33	455.74	21.3724510	03085				
678-	GRID	284	33	455.74	22.6296540	03085				
679-	GRID	285	33	455.74	23.8868570	03085				
680-	GRID	286	33	455.74	25.1440600	03085				
681-	GRID	287	33	455.74	26.4012630	03085				
682-	GRID	288	33	455.74	27.6584660	03085				
683-	GRID	289	33	455.74	28.9156690	03085				
684-	GRID	290	33	455.74	30.1728720	03085				
685-	GRID	291	33	455.74	31.4300750	03085				
686-	GRID	292	33	455.74	32.6872780	03085				
687-	GRID	293	33	455.74	33.9444810	03085				
688-	GRID	294	33	455.74	35.2016840	03085				
689-	GRID	295	33	455.74	36.4588870	03085				
690-	GRID	296	33	455.74	37.7160900	03085				
691-	GRID	297	33	455.74	38.9732930	03085				
692-	GRID	298	33	455.74	40.2304960	03085				
693-	GRID	299	33	455.74	41.4876990	03085				
694-	GRID	300	33	455.74	42.7449020	03085				
695-	GRID	301	33	455.74	44.0021050	03085				
696-	GRID	302	33	455.74	45.2593080	03085				
697-	GRID	303	33	455.74	46.5165110	03085				
698-	GRID	304	33	455.74	47.7737140	03085				
699-	GRID	305	33	455.74	49.0309170	03085				
700-	GRID	306	33	455.74	50.2881200	03085	3	1235		

S O R T E D B U L K D A T A E C H O

CARD COUNT	1	2	3	4	5	6	7	8	9
701-	GRID	307	33	455.74	5.1545330.	03085			
702-	GRID	308	33	455.74	5.2802540.	03085			
703-	GRID	309	33	455.74	5.4059740.	03085			
704-	GRID	310	33	455.74	5.5316940.	03085			
705-	GRID	311	33	455.74	5.6574140.	03085			
706-	GRID	312	33	455.74	5.7831350.	03085			
707-	GRID	313	33	455.74	5.9088550.	03085			
708-	GRID	314	33	455.74	6.0345750.	03085			
709-	GRID	315	33	455.74	6.1602960.	03085			
710-	GRID	316	33	455.74	6.2860160.	03085			
711-	GRID	317	33	455.74	6.4117360.	03085			
712-	GRID	318	33	455.74	6.5374570.	03085			
713-	GRID	319	33	455.74	6.6631770.	03085			
714-	GRID	320	33	455.74	6.7888970.	03085			
715-	GRID	321	33	455.74	6.9146180.	03085			
716-	GRID	322	33	455.74	7.0403380.	03085			
717-	GRID	323	33	455.74	7.1660580.	03085			
718-	GRID	324	33	455.74	7.2917790.	03085			
719-	GRID	325	33	455.74	7.4174990.	03085			
720-	GRID	326	33	455.74	7.5432190.	03085			
721-	GRID	327	33	455.74	7.6689400.	03085			
722-	GRID	328	33	455.74	7.7946600.	03085			
723-	GRID	329	33	455.74	7.9203800.	03085			
724-	GRID	330	33	455.74	8.0461010.	03085			
725-	GRID	331	33	455.74	8.1718210.	03085			
726-	GRID	332	33	455.74	8.2975410.	03085			
727-	GRID	333	33	455.74	8.4232620.	03085			
728-	GRID	334	33	455.74	8.5489820.	03085			
729-	GRID	335	33	455.74	8.6747020.	03085			
730-	GRID	336	33	455.74	8.8004220.	03085			
731-	GRID	337	33	455.74	8.9261430.	03085			
732-	GRID	338	33	455.74	9.0518630.	03085			
733-	GRID	339	33	455.74	9.1775840.	03085			
734-	GRID	340	33	455.74	9.3033040.	03085			
735-	GRID	341	33	455.74	9.4290240.	03085			
736-	GRID	342	33	455.74	9.5547440.	03085			
737-	GRID	343	33	455.74	9.6804650.	03085			
738-	GRID	344	33	455.74	9.8061850.	03085			
739-	GRID	345	33	455.74	9.9319050.	03085			
740-	GRID	346	33	455.74	10.057620.	03085			
741-	GRID	347	33	455.74	10.1833350.	03085			
742-	GRID	348	33	455.74	10.309070.	03085			
743-	GRID	349	33	455.74	10.434790.	03085			
744-	GRID	350	33	455.74	10.560510.	03085			
745-	GRID	351	33	455.74	10.686230.	03085			
746-	GRID	352	33	455.74	10.811950.	03085			
747-	GRID	353	33	455.74	10.937670.	03085			
748-	GRID	354	33	455.74	11.063390.	03085			
749-	GRID	355	33	455.74	11.189110.	03085			
750-	GRID	356	33	455.74	11.314830.	03085	13	1235	
751-	GRID	357	33	455.74	11.440550.	03085			
752-	GRID	358	33	455.74	11.566270.	03085			
753-	GRID	359	33	455.74	11.691990.	03085			
754-	GRID	360	33	455.74	11.817710.	03085			
755-	GRID	361	33	455.74	11.943430.	03085			
756-	GRID	362	33	455.74	12.069150.	03085			
757-	GRID	363	33	455.74	12.194870.	03085			
758-	GRID	364	33	455.74	12.320590.	03085			
759-	GRID	365	33	455.74	12.446310.	03085			
760-	GRID	366	33	455.74	12.572030.	03085			
761-	GRID	367	33	455.74	12.697750.	03085			
762-	GRID	368	33	455.74	12.823470.	03085			
763-	GRID	369	33	455.74	12.949190.	03085			
764-	GRID	370	33	455.74	13.074910.	03085			
765-	GRID	371	33	455.74	13.200630.	03085			
766-	GRID	372	33	455.74	13.326350.	03085			
767-	GRID	373	33	455.74	13.452070.	03085			
768-	GRID	374	33	455.74	13.577790.	03085			
769-	GRID	375	33	455.74	13.703510.	03085			
770-	GRID	376	33	455.74	13.829230.	03085			
771-	GRID	377	33	455.74	13.954950.	03085			
772-	GRID	378	33	455.74	14.080670.	03085			
773-	GRID	379	33	455.74	14.206390.	03085			
774-	GRID	380	33	455.74	14.332110.	03085			
775-	GRID	381	33	455.74	14.457830.	03085			
776-	GRID	382	33	455.74	14.583550.	03085			
777-	GRID	383	33	455.74	14.709270.	03085			
778-	GRID	384	33	455.74	14.835000.	03085			
779-	GRID	385	33	455.74	14.960720.	03085			
780-	GRID	386	33	455.74	15.086440.	03085			
781-	GRID	387	33	455.74	15.212160.	03085			
782-	GRID	388	33	455.74	15.337880.	03085			
783-	GRID	389	33	455.74	15.463600.	03085			
784-	GRID	390	33	455.74	15.589320.	03085			
785-	GRID	391	33	455.74	15.715040.	03085			
786-	GRID	392	33	455.74	15.840760.	03085			
787-	GRID	393	33	455.74	15.966480.	03085			
788-	GRID	394	33	455.74	16.092200.	03085			
789-	GRID	395	33	455.74	16.217920.	03085			
790-	GRID	396	33	455.74	16.343640.	03085	23	1235	
791-	MPC	1	32E+6	1	1	136	1	-1	
792-	MPC	2		2	1	136	2	-1	
793-	MPC	3		3	1	136	3	-1	
794-	MPC	4		4	1	136	4	-1	
795-	MPC	5		5	1	136	5	-1	
796-	MPC	1		1	1	137	1	-1	
797-	MPC	2		2	1	137	2	-1	
798-	MPC	3		3	1	137	3	-1	
799-	MPC	4		4	1	137	4	-1	
800-	MPC	5		5	1	137	5	-1	

CARD COUNT		2	3	4	5	6	7	8	9	10
801-	MPC	3	5	1	1	37	5	1		
802-	MPC	4	1	1	1	138	1	1		
803-	MPC	4	2	1	1	138	2	1		
804-	MPC	4	3	1	1	138	3	1		
805-	MPC	4	4	1	1	138	4	1		
806-	MPC	4	5	1	1	138	5	1		
807-	MPC	5	1	1	1	139	1	1		
808-	MPC	5	2	1	1	139	2	1		
809-	MPC	5	3	1	1	139	3	1		
810-	MPC	5	4	1	1	139	4	1		
811-	MPC	5	5	1	1	139	5	1		
812-	MPC	6	1	1	1	140	1	1		
813-	MPC	6	2	1	1	140	2	1		
814-	MPC	6	3	1	1	140	3	1		
815-	MPC	6	4	1	1	140	4	1		
816-	MPC	6	5	1	1	140	5	1		
817-	MPC	7	1	1	1	141	1	1		
818-	MPC	7	2	1	1	141	2	1		
819-	MPC	7	3	1	1	141	3	1		
820-	MPC	7	4	1	1	141	4	1		
821-	MPC	7	5	1	1	141	5	1		
822-	MPC	8	1	1	1	142	1	1		
823-	MPC	8	2	1	1	142	2	1		
824-	MPC	8	3	1	1	142	3	1		
825-	MPC	8	4	1	1	142	4	1		
826-	MPC	8	5	1	1	142	5	1		
827-	MPC	9	1	1	1	143	1	1		
828-	MPC	9	2	1	1	143	2	1		
829-	MPC	9	3	1	1	143	3	1		
830-	MPC	9	4	1	1	143	4	1		
831-	MPC	9	5	1	1	143	5	1		
832-	MPC	10	1	1	1	144	1	1		
833-	MPC	10	2	1	1	144	2	1		
834-	MPC	10	3	1	1	144	3	1		
835-	MPC	10	4	1	1	144	4	1		
836-	MPC	10	5	1	1	144	5	1		
837-	MPC	11	1	1	1	145	1	1		
838-	MPC	11	2	1	1	145	2	1		
839-	MPC	11	3	1	1	145	3	1		
840-	MPC	11	4	1	1	145	4	1		
841-	MPC	11	5	1	1	145	5	1		
842-	MPC	12	1	1	1	146	1	1		
843-	MPC	12	2	1	1	146	2	1		
844-	MPC	12	3	1	1	146	3	1		
845-	MPC	12	4	1	1	146	4	1		
846-	MPC	12	5	1	1	146	5	1		
847-	MPC	13	1	1	1	147	1	1		
848-	MPC	13	2	1	1	147	2	1		
849-	MPC	13	3	1	1	147	3	1		
850-	MPC	13	4	1	1	147	4	1		
851-	MPC	13	5	1	1	147	5	1		
852-	MPC	14	1	1	1	148	1	1		
853-	MPC	14	2	1	1	148	2	1		
854-	MPC	14	3	1	1	148	3	1		
855-	MPC	14	4	1	1	148	4	1		
856-	MPC	14	5	1	1	148	5	1		
857-	MPC	15	1	1	1	149	1	1		
858-	MPC	15	2	1	1	149	2	1		
859-	MPC	15	3	1	1	149	3	1		
860-	MPC	15	4	1	1	149	4	1		
861-	MPC	15	5	1	1	149	5	1		
862-	MPC	16	1	1	1	150	1	1		
863-	MPC	16	2	1	1	150	2	1		
864-	MPC	16	3	1	1	150	3	1		
865-	MPC	16	4	1	1	150	4	1		
866-	MPC	16	5	1	1	150	5	1		
867-	MPC	17	1	1	1	151	1	1		
868-	MPC	17	2	1	1	151	2	1		
869-	MPC	17	3	1	1	151	3	1		
870-	MPC	17	4	1	1	151	4	1		
871-	MPC	17	5	1	1	151	5	1		
872-	MPC	18	1	1	1	152	1	1		
873-	MPC	18	2	1	1	152	2	1		
874-	MPC	18	3	1	1	152	3	1		
875-	MPC	18	4	1	1	152	4	1		
876-	MPC	18	5	1	1	152	5	1		
877-	MPC	19	1	1	1	153	1	1		
878-	MPC	19	2	1	1	153	2	1		
879-	MPC	19	3	1	1	153	3	1		
880-	MPC	19	4	1	1	153	4	1		
881-	MPC	19	5	1	1	153	5	1		
882-	MPC	20	1	1	1	154	1	1		
883-	MPC	20	2	1	1	154	2	1		
884-	MPC	20	3	1	1	154	3	1		
885-	MPC	20	4	1	1	154	4	1		
886-	MPC	20	5	1	1	154	5	1		
887-	MPC	21	1	1	1	155	1	1		
888-	MPC	21	2	1	1	155	2	1		
889-	MPC	21	3	1	1	155	3	1		
890-	MPC	21	4	1	1	155	4	1		
891-	MPC	21	5	1	1	155	5	1		
892-	MPC	22	1	1	1	156	1	1		
893-	MPC	22	2	1	1	156	2	1		
894-	MPC	22	3	1	1	156	3	1		
895-	MPC	22	4	1	1	156	4	1		
896-	MPC	22	5	1	1	156	5	1		
897-	MPC	23	1	1	1	157	1	1		
898-	MPC	23	2	1	1	157	2	1		
899-	MPC	23	3	1	1	157	3	1		
900-	MPC	23	4	1	1	157	4	1		

CAHD COUNT	1	2	3	4	5	6	7	8	9	10
901-	MPC	23	5	1	1	57	5	1	1	1
902-	MPC	24	1	1	1	58	1	1	1	1
903-	MPC	24	2	1	1	58	2	1	1	1
904-	MPC	24	3	1	1	59	3	1	1	1
905-	MPC	24	4	1	1	58	4	1	1	1
906-	MPC	24	5	1	1	58	5	1	1	1
907-	MPC	25	1	1	1	59	1	1	1	1
908-	MPC	25	2	1	1	59	2	1	1	1
909-	MPC	25	3	1	1	59	3	1	1	1
910-	MPC	25	4	1	1	59	4	1	1	1
911-	MPC	25	5	1	1	59	5	1	1	1
912-	MPC	26	1	1	1	60	1	1	1	1
913-	MPC	26	2	1	1	60	2	1	1	1
914-	MPC	26	3	1	1	60	3	1	1	1
915-	MPC	26	4	1	1	60	4	1	1	1
916-	MPC	26	5	1	1	60	5	1	1	1
917-	MPC	27	1	1	1	61	1	1	1	1
918-	MPC	27	2	1	1	61	2	1	1	1
919-	MPC	27	3	1	1	61	3	1	1	1
920-	MPC	27	4	1	1	61	4	1	1	1
921-	MPC	27	5	1	1	61	5	1	1	1
922-	MPC	28	1	1	1	62	1	1	1	1
923-	MPC	28	2	1	1	62	2	1	1	1
924-	MPC	28	3	1	1	62	3	1	1	1
925-	MPC	28	4	1	1	62	4	1	1	1
926-	MPC	28	5	1	1	62	5	1	1	1
927-	MPC	29	1	1	1	63	1	1	1	1
928-	MPC	29	2	1	1	63	2	1	1	1
929-	MPC	29	3	1	1	63	3	1	1	1
930-	MPC	29	4	1	1	63	4	1	1	1
931-	MPC	29	5	1	1	63	5	1	1	1
932-	MPC	30	1	1	1	64	1	1	1	1
933-	MPC	30	2	1	1	64	2	1	1	1
934-	MPC	30	3	1	1	64	3	1	1	1
935-	MPC	30	4	1	1	64	4	1	1	1
936-	MPC	30	5	1	1	64	5	1	1	1
937-	MPC	31	1	1	1	65	1	1	1	1
938-	MPC	31	2	1	1	65	2	1	1	1
939-	MPC	31	3	1	1	65	3	1	1	1
940-	MPC	31	4	1	1	65	4	1	1	1
941-	MPC	31	5	1	1	65	5	1	1	1
942-	MPC	32	1	1	1	66	1	1	1	1
943-	MPC	32	2	1	1	66	2	1	1	1
944-	MPC	32	3	1	1	66	3	1	1	1
945-	MPC	32	4	1	1	66	4	1	1	1
946-	MPC	32	5	1	1	66	5	1	1	1
947-	MPC	33	1	1	1	67	1	1	1	1
948-	MPC	33	2	1	1	67	2	1	1	1
949-	MPC	33	3	1	1	67	3	1	1	1
950-	MPC	33	4	1	1	67	4	1	1	1
951-	MPC	33	5	1	1	67	5	1	1	1
952-	MPC	34	1	1	1	68	1	1	1	1
953-	MPC	34	2	1	1	68	2	1	1	1
954-	MPC	34	3	1	1	68	3	1	1	1
955-	MPC	34	4	1	1	68	4	1	1	1
956-	MPC	34	5	1	1	68	5	1	1	1
957-	MPC	35	1	1	1	69	1	1	1	1
958-	MPC	35	2	1	1	69	2	1	1	1
959-	MPC	35	3	1	1	69	3	1	1	1
960-	MPC	35	4	1	1	69	4	1	1	1
961-	MPC	35	5	1	1	69	5	1	1	1
962-	MPC	36	1	1	1	70	1	1	1	1
963-	MPC	36	2	1	1	70	2	1	1	1
964-	MPC	36	3	1	1	70	3	1	1	1
965-	MPC	36	4	1	1	70	4	1	1	1
966-	MPC	36	5	1	1	70	5	1	1	1
967-	MPC	37	1	1	1	71	1	1	1	1
968-	MPC	37	2	1	1	71	2	1	1	1
969-	MPC	37	3	1	1	71	3	1	1	1
970-	MPC	37	4	1	1	71	4	1	1	1
971-	MPC	37	5	1	1	71	5	1	1	1
972-	MPC	38	1	1	1	72	1	1	1	1
973-	MPC	38	2	1	1	72	2	1	1	1
974-	MPC	38	3	1	1	72	3	1	1	1
975-	MPC	38	4	1	1	72	4	1	1	1
976-	MPC	38	5	1	1	72	5	1	1	1
977-	MPC	39	1	1	1	73	1	1	1	1
978-	MPC	39	2	1	1	73	2	1	1	1
979-	MPC	39	3	1	1	73	3	1	1	1
980-	MPC	39	4	1	1	73	4	1	1	1
981-	MPC	39	5	1	1	73	5	1	1	1
982-	MPC	40	1	1	1	74	1	1	1	1
983-	MPC	40	2	1	1	74	2	1	1	1
984-	MPC	40	3	1	1	74	3	1	1	1
985-	MPC	40	4	1	1	74	4	1	1	1
986-	MPC	40	5	1	1	74	5	1	1	1
987-	MPC	42	1	1	1	76	1	1	1	1
988-	MPC	42	2	1	1	76	2	1	1	1
989-	MPC	42	3	1	1	76	3	1	1	1
990-	MPC	42	4	1	1	76	4	1	1	1
991-	MPC	42	5	1	1	76	5	1	1	1
992-	MPC	43	1	1	1	77	1	1	1	1
993-	MPC	43	2	1	1	77	2	1	1	1
994-	MPC	43	3	1	1	77	3	1	1	1
995-	MPC	43	4	1	1	77	4	1	1	1
996-	MPC	43	5	1	1	77	5	1	1	1
997-	MPC	44	1	1	1	79	1	1	1	1
998-	MPC	44	2	1	1	79	2	1	1	1
999-	MPC	44	3	1	1	79	3	1	1	1
1000-	MPC	44	4	1	1	79	4	1	1	1

CARD COUNT		2	3	4	5	6	7	8	9	10
1001-	MPC	44	5	1	1	178	5	1	1	1
1002-	MPC	45	2	1	1	179	2	1	1	1
1003-	MPC	45	3	1	1	179	3	1	1	1
1004-	MPC	45	4	1	1	179	4	1	1	1
1005-	MPC	45	5	1	1	179	5	1	1	1
1006-	MPC	46	1	1	1	180	1	1	1	1
1007-	MPC	46	2	1	1	180	2	1	1	1
1008-	MPC	46	3	1	1	180	3	1	1	1
1009-	MPC	46	4	1	1	180	4	1	1	1
1010-	MPC	46	5	1	1	180	5	1	1	1
1011-	MPC	47	1	1	1	181	1	1	1	1
1012-	MPC	47	2	1	1	181	2	1	1	1
1013-	MPC	47	3	1	1	181	3	1	1	1
1014-	MPC	47	4	1	1	181	4	1	1	1
1015-	MPC	48	1	1	1	182	1	1	1	1
1016-	MPC	48	2	1	1	182	2	1	1	1
1017-	MPC	48	3	1	1	182	3	1	1	1
1018-	MPC	48	4	1	1	182	4	1	1	1
1019-	MPC	48	5	1	1	182	5	1	1	1
1020-	MPC	49	1	1	1	183	1	1	1	1
1021-	MPC	49	2	1	1	183	2	1	1	1
1022-	MPC	49	3	1	1	183	3	1	1	1
1023-	MPC	49	4	1	1	183	4	1	1	1
1024-	MPC	49	5	1	1	183	5	1	1	1
1025-	MPC	50	1	1	1	184	1	1	1	1
1026-	MPC	50	2	1	1	184	2	1	1	1
1027-	MPC	50	3	1	1	184	3	1	1	1
1028-	MPC	50	4	1	1	184	4	1	1	1
1029-	MPC	50	5	1	1	184	5	1	1	1
1030-	MPC	51	1	1	1	185	1	1	1	1
1031-	MPC	51	2	1	1	185	2	1	1	1
1032-	MPC	51	3	1	1	185	3	1	1	1
1033-	MPC	51	4	1	1	185	4	1	1	1
1034-	MPC	51	5	1	1	185	5	1	1	1
1035-	MPC	52	1	1	1	186	1	1	1	1
1036-	MPC	52	2	1	1	186	2	1	1	1
1037-	MPC	52	3	1	1	186	3	1	1	1
1038-	MPC	52	4	1	1	186	4	1	1	1
1039-	MPC	52	5	1	1	186	5	1	1	1
1040-	MPC	53	1	1	1	187	1	1	1	1
1041-	MPC	53	2	1	1	187	2	1	1	1
1042-	MPC	53	3	1	1	187	3	1	1	1
1043-	MPC	53	4	1	1	187	4	1	1	1
1044-	MPC	53	5	1	1	187	5	1	1	1
1045-	MPC	54	1	1	1	188	1	1	1	1
1046-	MPC	54	2	1	1	188	2	1	1	1
1047-	MPC	54	3	1	1	188	3	1	1	1
1048-	MPC	54	4	1	1	188	4	1	1	1
1049-	MPC	54	5	1	1	188	5	1	1	1
1050-	MPC	55	1	1	1	189	1	1	1	1
1051-	MPC	55	2	1	1	189	2	1	1	1
1052-	MPC	55	3	1	1	189	3	1	1	1
1053-	MPC	55	4	1	1	189	4	1	1	1
1054-	MPC	55	5	1	1	189	5	1	1	1
1055-	MPC	56	1	1	1	190	1	1	1	1
1056-	MPC	56	2	1	1	190	2	1	1	1
1057-	MPC	56	3	1	1	190	3	1	1	1
1058-	MPC	56	4	1	1	190	4	1	1	1
1059-	MPC	56	5	1	1	190	5	1	1	1
1060-	MPC	57	1	1	1	191	1	1	1	1
1061-	MPC	57	2	1	1	191	2	1	1	1
1062-	MPC	57	3	1	1	191	3	1	1	1
1364-	MPC	57	4	1	1	191	4	1	1	1
1065-	MPC	57	5	1	1	191	5	1	1	1
1066-	MPC	58	1	1	1	192	1	1	1	1
1067-	MPC	58	2	1	1	192	2	1	1	1
1068-	MPC	58	3	1	1	192	3	1	1	1
1069-	MPC	58	4	1	1	192	4	1	1	1
1070-	MPC	58	5	1	1	192	5	1	1	1
1071-	MPC	59	1	1	1	193	1	1	1	1
1072-	MPC	59	2	1	1	193	2	1	1	1
1073-	MPC	59	3	1	1	193	3	1	1	1
1074-	MPC	59	4	1	1	193	4	1	1	1
1075-	MPC	59	5	1	1	193	5	1	1	1
1076-	MPC	60	1	1	1	194	1	1	1	1
1077-	MPC	60	2	1	1	194	2	1	1	1
1078-	MPC	60	3	1	1	194	3	1	1	1
1079-	MPC	60	4	1	1	194	4	1	1	1
1080-	MPC	60	5	1	1	194	5	1	1	1
1081-	MPC	61	1	1	1	195	1	1	1	1
1082-	MPC	61	2	1	1	195	2	1	1	1
1083-	MPC	61	3	1	1	195	3	1	1	1
1084-	MPC	61	4	1	1	195	4	1	1	1
1085-	MPC	61	5	1	1	195	5	1	1	1
1086-	MPC	62	1	1	1	196	1	1	1	1
1087-	MPC	62	2	1	1	196	2	1	1	1
1088-	MPC	62	3	1	1	196	3	1	1	1
1089-	MPC	62	4	1	1	196	4	1	1	1
1090-	MPC	62	5	1	1	196	5	1	1	1
1091-	MPC	63	1	1	1	197	1	1	1	1
1092-	MPC	63	2	1	1	197	2	1	1	1
1093-	MPC	63	3	1	1	197	3	1	1	1
1094-	MPC	63	4	1	1	197	4	1	1	1
1095-	MPC	63	5	1	1	197	5	1	1	1
1096-	MPC	64	1	1	1	198	1	1	1	1
1097-	MPC	64	2	1	1	198	2	1	1	1
1098-	MPC	64	3	1	1	198	3	1	1	1
1099-	MPC	64	4	1	1	198	4	1	1	1
1100-	MPC	64	5	1	1	198	5	1	1	1

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1101-	HP	64	5	1	1	198	5	1	1	1
1102-	HP	65	2	1	1	199	1	1	1	1
1103-	HP	65	2	1	1	199	1	1	1	1
1104-	HP	65	4	1	1	197	1	1	1	1
1105-	HP	65	5	1	1	199	1	1	1	1
1106-	HP	66	1	1	1	200	1	1	1	1
1108-	HP	66	2	1	1	200	1	1	1	1
1109-	HP	66	3	1	1	200	1	1	1	1
1110-	HP	66	4	1	1	200	1	1	1	1
1111-	HP	66	5	1	1	209	1	1	1	1
1112-	HP	67	1	1	1	201	1	1	1	1
1113-	HP	67	2	1	1	201	1	1	1	1
1114-	HP	67	3	1	1	201	1	1	1	1
1115-	HP	67	4	1	1	201	1	1	1	1
1116-	HP	67	5	1	1	201	1	1	1	1
1117-	HP	68	1	1	1	202	1	1	1	1
1118-	HP	68	2	1	1	202	1	1	1	1
1119-	HP	68	3	1	1	202	1	1	1	1
1120-	HP	68	4	1	1	202	1	1	1	1
1121-	HP	68	5	1	1	202	1	1	1	1
1122-	HP	69	1	1	1	203	1	1	1	1
1123-	HP	69	2	1	1	203	1	1	1	1
1124-	HP	69	3	1	1	203	1	1	1	1
1125-	HP	69	4	1	1	203	1	1	1	1
1126-	HP	70	5	1	1	203	1	1	1	1
1127-	HP	70	1	1	1	204	1	1	1	1
1128-	HP	70	2	1	1	204	1	1	1	1
1129-	HP	70	3	1	1	204	1	1	1	1
1130-	HP	70	4	1	1	204	1	1	1	1
1131-	HP	70	5	1	1	204	1	1	1	1
1132-	HP	71	1	1	1	205	1	1	1	1
1133-	HP	71	2	1	1	205	1	1	1	1
1134-	HP	71	3	1	1	205	1	1	1	1
1135-	HP	71	4	1	1	205	1	1	1	1
1136-	HP	71	5	1	1	205	1	1	1	1
1137-	HP	72	1	1	1	206	1	1	1	1
1138-	HP	72	2	1	1	206	1	1	1	1
1139-	KYC	72	3	1	1	206	1	1	1	1
1140-	HP	72	4	1	1	206	1	1	1	1
1141-	HP	72	5	1	1	206	1	1	1	1
1142-	HP	73	1	1	1	207	1	1	1	1
1143-	HP	73	2	1	1	207	1	1	1	1
1144-	HP	73	3	1	1	207	1	1	1	1
1145-	HP	73	4	1	1	207	1	1	1	1
1146-	HP	73	5	1	1	237	1	1	1	1
1147-	HP	74	1	1	1	200	1	1	1	1
1148-	HP	74	2	1	1	208	1	1	1	1
1149-	HP	74	3	1	1	208	1	1	1	1
1150-	HP	74	4	1	1	209	1	1	1	1
1151-	HP	74	5	1	1	LOO	1	1	1	1
1152-	HP	75	1	1	1	209	1	1	1	1
1153-	HP	75	2	1	1	209	1	1	1	1
1154-	HP	75	3	1	1	209	1	1	1	1
1155-	HP	75	4	1	1	209	1	1	1	1
1156-	HP	75	5	1	1	209	1	1	1	1
1157-	MI	76	1	1	1	110	1	1	1	1
1158-	HP	76	2	1	1	210	1	1	1	1
1159-	HP	76	3	1	1	210	1	1	1	1
1160-	HP	76	4	1	1	210	1	1	1	1
1161-	HP	76	5	1	1	210	1	1	1	1
1162-	HP	77	1	1	1	211	1	1	1	1
1163-	HP	77	2	1	1	211	1	1	1	1
1164-	HP	77	3	1	1	211	1	1	1	1
1165-	HP	77	4	1	1	211	1	1	1	1
1166-	HP	77	5	1	1	211	1	1	1	1
1167-	HP	78	1	1	1	212	1	1	1	1
1168-	HP	78	2	1	1	212	1	1	1	1
1169-	HP	78	3	1	1	212	1	1	1	1
1170-	HP	78	4	1	1	212	1	1	1	1
1171-	HP	78	5	1	1	212	1	1	1	1
1172-	HP	79	1	1	1	213	1	1	1	1
1173-	HP	79	2	1	1	213	1	1	1	1
1174-	HP	79	3	1	1	213	1	1	1	1
1175-	HP	79	4	1	1	213	1	1	1	1
1176-	HP	79	5	1	1	213	1	1	1	1
1177-	HP	80	1	1	1	214	1	1	1	1
1178-	HP	80	2	1	1	214	1	1	1	1
1179-	HP	80	3	1	1	214	1	1	1	1
1180-	HP	80	4	1	1	214	1	1	1	1
1181-	HP	80	5	1	1	214	1	1	1	1
1182-	HP	81	1	1	1	215	1	1	1	1
1183-	HP	81	2	1	1	215	1	1	1	1
1184-	HP	81	3	1	1	215	1	1	1	1
1185-	HP	81	4	1	1	215	1	1	1	1
1186-	HP	81	5	1	1	215	1	1	1	1
1187-	HP	82	1	1	1	215	1	1	1	1
1188-	HP	82	2	1	1	216	1	1	1	1
1189-	HP	82	3	1	1	216	1	1	1	1
1190-	HP	82	4	1	1	216	1	1	1	1
1191-	HP	82	5	1	1	216	1	1	1	1
1192-	HP	83	1	1	1	217	1	1	1	1
1193-	HP	83	2	1	1	217	1	1	1	1
1194-	HP	83	3	1	1	217	1	1	1	1
1195-	HP	83	4	1	1	217	1	1	1	1
1196-	HP	83	5	1	1	217	1	1	1	1
1197-	HP	84	1	1	1	218	1	1	1	1
1198-	HP	84	2	1	1	218	1	1	1	1
1199-	HP	84	3	1	1	219	1	1	1	1
1200-	HP	84	4	1	1	219	1	1	1	1

CAHD COUNT	1	2	3	4	5	6	7	8	9	10
1201-	MPC	84	5	1	1	218	5	1		
1202-	MPC	85	1	1	1	219	1	1		
1203-	MPC	85	2	1	1	219	2	1		
1204-	MPC	85	4	1	1	219	4	1		
1205-	MPC	85	5	1	1	219	5	1		
1206-	MPC	86	1	1	1	220	1	1		
1207-	MPC	86	2	1	1	220	2	1		
1208-	MPC	86	4	1	1	220	4	1		
1209-	MPC	86	5	1	1	220	5	1		
1210-	MPC	86	1	1	1	221	1	1		
1211-	MPC	86	5	1	1	221	5	1		
1212-	MPC	87	1	1	1	221	1	1		
1213-	MPC	87	2	1	1	221	2	1		
1214-	MPC	87	3	1	1	221	3	1		
1215-	MPC	87	4	1	1	221	4	1		
1216-	MPC	87	5	1	1	221	5	1		
1217-	MPC	88	1	1	1	222	1	1		
1218-	MPC	88	2	1	1	222	2	1		
1219-	MPC	88	3	1	1	222	3	1		
1220-	MPC	88	4	1	1	222	4	1		
1221-	MPC	88	5	1	1	222	5	1		
1222-	MPC	89	1	1	1	223	1	1		
1223-	MPC	89	2	1	1	223	2	1		
1224-	MPC	89	3	1	1	223	3	1		
1225-	MPC	89	4	1	1	223	4	1		
1226-	MPC	89	5	1	1	223	5	1		
1227-	MPC	90	1	1	1	224	1	1		
1228-	MPC	90	2	1	1	224	2	1		
1229-	MPC	90	3	1	1	224	3	1		
1230-	MPC	90	4	1	1	224	4	1		
1231-	MPC	90	5	1	1	224	5	1		
1232-	MPC	92	1	1	1	225	1	1		
1233-	MPC	92	2	1	1	226	2	1		
1234-	MPC	92	3	1	1	226	3	1		
1235-	MPC	92	4	1	1	226	4	1		
1236-	MPC	92	5	1	1	226	5	1		
1237-	MPC	93	1	1	1	227	1	1		
1238-	MPC	93	2	1	1	227	2	1		
1239-	MPC	93	3	1	1	227	3	1		
1240-	MPC	93	4	1	1	227	4	1		
1241-	MPC	93	5	1	1	227	5	1		
1242-	MPC	94	1	1	1	228	1	1		
1243-	MPC	94	2	1	1	228	2	1		
1244-	MPC	94	3	1	1	228	3	1		
1245-	MPC	94	4	1	1	228	4	1		
1246-	MPC	94	5	1	1	228	5	1		
1247-	MPC	95	1	1	1	229	1	1		
1248-	MPC	95	2	1	1	229	2	1		
1249-	MPC	95	3	1	1	229	3	1		
1250-	MPC	95	4	1	1	229	4	1		
1251-	MPC	95	5	1	1	229	5	1		
1252-	MPC	96	1	1	1	230	1	1		
1253-	MPC	96	2	1	1	230	2	1		
1254-	MPC	96	3	1	1	230	3	1		
1255-	MPC	96	4	1	1	230	4	1		
1256-	MPC	96	5	1	1	230	5	1		
1257-	MPC	97	1	1	1	231	1	1		
1258-	MPC	97	2	1	1	231	2	1		
1259-	MPC	97	3	1	1	231	3	1		
1260-	MPC	97	4	1	1	231	4	1		
1261-	MPC	97	5	1	1	231	5	1		
1262-	MPC	98	1	1	1	232	1	1		
1263-	MPC	98	2	1	1	232	2	1		
1264-	MPC	98	3	1	1	232	3	1		
1265-	MPC	98	4	1	1	232	4	1		
1266-	MPC	98	5	1	1	232	5	1		
1267-	MPC	99	1	1	1	233	1	1		
1268-	MPC	99	2	1	1	233	2	1		
1269-	MPC	99	3	1	1	233	3	1		
1270-	MPC	99	4	1	1	233	4	1		
1271-	MPC	99	5	1	1	233	5	1		
1272-	MPC	100	1	1	1	234	1	1		
1273-	MPC	100	2	1	1	234	2	1		
1274-	MPC	100	3	1	1	234	3	1		
1275-	MPC	100	4	1	1	234	4	1		
1276-	MPC	100	5	1	1	234	5	1		
1277-	MPC	101	1	1	1	235	1	1		
1278-	MPC	101	2	1	1	235	2	1		
1279-	MPC	101	3	1	1	235	3	1		
1280-	MPC	101	4	1	1	235	4	1		
1281-	MPC	101	5	1	1	235	5	1		
1282-	MPC	102	1	1	1	236	1	1		
1283-	MPC	102	2	1	1	236	2	1		
1284-	MPC	102	3	1	1	236	3	1		
1285-	MPC	102	4	1	1	236	4	1		
1286-	MPC	102	5	1	1	236	5	1		
1287-	MPC	103	1	1	1	237	1	1		
1288-	MPC	103	2	1	1	237	2	1		
1289-	MPC	103	3	1	1	237	3	1		
1290-	MPC	103	4	1	1	237	4	1		
1291-	MPC	103	5	1	1	237	5	1		
1292-	MPC	104	1	1	1	238	1	1		
1293-	MPC	104	2	1	1	238	2	1		
1294-	MPC	104	3	1	1	238	3	1		
1295-	MPC	104	4	1	1	238	4	1		
1296-	MPC	104	5	1	1	238	5	1		
1297-	MPC	105	1	1	1	239	1	1		
1298-	MPC	105	2	1	1	239	2	1		
1299-	MPC	105	3	1	1	239	3	1		
1300-	OPC	105	4	1	1	239	4	1		

CARD	1	2	3	4	5	6	7	8	9	10
CARD										
COUNT										
1301-	MPC	105	5	1	1.	239	5	1		
1302-	MPC	106	1	2	1.	240	1	2		
1303-	MPC	106	2	2	1.	240	2	2		
1304-	MPC	106	3	3	1.	240	3	3		
1305-	MPC	106	4	4	1.	240	4	4		
1306-	MPC	106	5	5	1.	240	5	5		
1307-	MPC	107	1	1	1.	241	1	1		
1308-	MPC	107	2	2	1.	241	2	2		
1309-	MPC	107	3	3	1.	241	3	3		
1310-	MPC	107	4	4	1.	241	4	4		
1311-	MPC	107	5	5	1.	241	5	5		
1312-	MPC	108	1	1	1.	242	1	1		
1313-	MPC	108	2	2	1.	242	2	2		
1314-	MPC	108	3	3	1.	242	3	3		
1315-	MPC	108	4	4	1.	242	4	4		
1316-	MPC	108	5	5	1.	242	5	5		
1317-	MPC	109	1	1	1.	243	1	1		
1318-	MPC	109	2	2	1.	243	2	2		
1319-	MPC	109	3	3	1.	243	3	3		
1320-	MPC	109	4	4	1.	243	4	4		
1321-	MPC	109	5	5	1.	243	5	5		
1322-	MPC	110	1	1	1.	244	1	1		
1323-	MPC	110	2	2	1.	244	2	2		
1324-	MPC	110	3	3	1.	244	3	3		
1325-	MPC	110	4	4	1.	244	4	4		
1326-	MPC	110	5	5	1.	244	5	5		
1327-	MPC	111	1	1	1.	245	1	1		
1328-	MPC	111	2	2	1.	245	2	2		
1329-	MPC	111	3	3	1.	245	3	3		
1330-	MPC	111	4	4	1.	245	4	4		
1331-	MPC	111	5	5	1.	245	5	5		
1332-	MPC	112	1	1	1.	246	1	1		
1333-	MPC	112	2	2	1.	246	2	2		
1334-	MPC	112	3	3	1.	246	3	3		
1335-	MPC	112	4	4	1.	246	4	4		
1336-	MPC	112	5	5	1.	246	5	5		
1337-	MPC	113	1	1	1.	247	1	1		
1338-	MPC	113	2	2	1.	247	2	2		
1339-	MPC	113	3	3	1.	247	3	3		
1340-	MPC	113	4	4	1.	247	4	4		
1341-	MPC	113	5	5	1.	247	5	5		
1342-	MPC	114	1	1	1.	248	1	1		
1343-	MPC	114	2	2	1.	248	2	2		
1344-	MPC	114	3	3	1.	248	3	3		
1345-	MPC	114	4	4	1.	248	4	4		
1346-	MPC	114	5	5	1.	248	5	5		
1347-	MPC	115	1	1	1.	249	1	1		
1348-	MPC	115	2	2	1.	249	2	2		
1349-	MPC	115	3	3	1.	249	3	3		
1350-	MPC	115	4	4	1.	249	4	4		
1351-	MPC	115	5	5	1.	249	5	5		
1352-	MPC	116	1	1	1.	250	1	1		
1353-	MPC	116	2	2	1.	250	2	2		
1354-	MPC	116	3	3	1.	250	3	3		
1355-	MPC	116	4	4	1.	250	4	4		
1356-	MPC	116	5	5	1.	250	5	5		
1357-	MPC	117	1	1	1.	251	1	1		
1358-	MPC	117	2	2	1.	251	2	2		
1359-	MPC	117	3	3	1.	251	3	3		
1360-	MPC	117	4	4	1.	251	4	4		
1361-	MPC	117	5	5	1.	251	5	5		
1362-	MPC	118	1	1	1.	252	1	1		
1363-	MPC	118	2	2	1.	252	2	2		
1364-	MPC	118	3	3	1.	252	3	3		
1365-	MPC	118	4	4	1.	252	4	4		
1366-	MPC	118	5	5	1.	252	5	5		
1367-	MPC	119	1	1	1.	253	1	1		
1368-	MPC	119	2	2	1.	253	2	2		
1369-	MPC	119	3	3	1.	253	3	3		
1370-	MPC	119	4	4	1.	253	4	4		
1371-	MPC	119	5	5	1.	253	5	5		
1372-	MPC	120	1	1	1.	254	1	1		
1373-	MPC	120	2	2	1.	254	2	2		
1374-	MPC	120	3	3	1.	254	3	3		
1375-	MPC	120	4	4	1.	254	4	4		
1376-	MPC	120	5	5	1.	254	5	5		
1377-	MPC	121	1	1	1.	255	1	1		
1378-	MPC	121	2	2	1.	255	2	2		
1379-	MPC	121	3	3	1.	255	3	3		
1380-	MPC	121	4	4	1.	255	4	4		
1381-	MPC	121	5	5	1.	255	5	5		
1382-	MPC	122	1	1	1.	256	1	1		
1383-	MPC	122	2	2	1.	256	2	2		
1384-	MPC	122	3	3	1.	256	3	3		
1385-	MPC	122	4	4	1.	256	4	4		
1386-	MPC	122	5	5	1.	256	5	5		
1387-	MPC	123	1	1	1.	257	1	1		
1388-	MPC	123	2	2	1.	257	2	2		
1389-	MPC	123	3	3	1.	257	3	3		
1390-	MPC	123	4	4	1.	257	4	4		
1391-	MPC	123	5	5	1.	257	5	5		
1392-	MPC	124	1	1	1.	258	1	1		
1393-	MPC	124	2	2	1.	258	2	2		
1394-	MPC	124	3	3	1.	258	3	3		
1395-	MPC	124	4	4	1.	258	4	4		
1396-	MPC	124	5	5	1.	258	5	5		
1397-	MPC	125	1	1	1.	259	1	1		
1398-	MPC	125	2	2	1.	259	2	2		
1399-	MPC	125	3	3	1.	259	3	3		
1400-	MPC	125	4	4	1.	259	4	4		

CARD COUNT		1	2	3	4	5	6	7	8	9	10
1401-	MPC			125	1		259	1	-1.		
1402-	MPC			126	2		260	2	-1.		
1403-	MPC			126	3		260	3	-1.		
1404-	MPC			126	4		260	4	-1.		
1405-	MPC			126	5		260	5	-1.		
1406-	MPC			126	1		261	1	-1.		
1407-	MPC			127	2		261	2	-1.		
1408-	MPC			127	3		261	3	-1.		
1409-	MPC			127	4		261	4	-1.		
1410-	MPC			127	5		261	5	-1.		
1411-	MPC			127	1		262	1	-1.		
1412-	MPC			128	2		262	2	-1.		
1413-	MPC			128	3		262	3	-1.		
1414-	MPC			128	4		262	4	-1.		
1415-	MPC			128	5		262	5	-1.		
1416-	MPC			128	1		263	1	-1.		
1417-	MPC			129	2		263	2	-1.		
1418-	MPC			129	3		263	3	-1.		
1419-	MPC			129	4		263	4	-1.		
1420-	MPC			129	5		263	5	-1.		
1421-	MPC			130	1		264	1	-1.		
1422-	MPC			130	2		264	2	-1.		
1423-	MPC			130	3		264	3	-1.		
1424-	MPC			130	4		264	4	-1.		
1425-	MPC			130	5		264	5	-1.		
1426-	MPC			130	1		267	1	-1.		
1427-	MPC			136	2		267	2	-1.		
1428-	MPC			136	3		267	3	-1.		
1429-	MPC			136	4		267	4	-1.		
1430-	MPC			136	5		267	5	-1.		
1431-	MPC			137	1		268	1	-1.		
1432-	MPC			137	2		268	2	-1.		
1433-	MPC			137	3		268	3	-1.		
1434-	MPC			137	4		268	4	-1.		
1435-	MPC			137	5		268	5	-1.		
1436-	MPC			138	1		269	1	-1.		
1437-	MPC			138	2		269	2	-1.		
1438-	MPC			138	3		269	3	-1.		
1439-	MPC			138	4		269	4	-1.		
1440-	MPC			138	5		269	5	-1.		
1441-	MPC			139	1		270	1	-1.		
1442-	MPC			139	2		270	2	-1.		
1443-	MPC			139	3		270	3	-1.		
1444-	MPC			139	4		270	4	-1.		
1445-	MPC			139	5		270	5	-1.		
1446-	MPC			140	1		271	1	-1.		
1447-	MPC			140	2		271	2	-1.		
1448-	MPC			140	3		271	3	-1.		
1449-	MPC			140	4		271	4	-1.		
1450-	MPC			140	5		271	5	-1.		
1451-	MPC			141	1		272	1	-1.		
1452-	MPC			141	2		272	2	-1.		
1453-	MPC			141	3		272	3	-1.		
1454-	MPC			141	4		272	4	-1.		
1455-	MPC			141	5		272	5	-1.		
1456-	MPC			142	1		273	1	-1.		
1457-	MPC			142	2		273	2	-1.		
1458-	MPC			142	3		273	3	-1.		
1459-	MPC			142	4		273	4	-1.		
1460-	MPC			142	5		273	5	-1.		
1461-	MPC			143	1		274	1	-1.		
1462-	MPC			143	2		274	2	-1.		
1463-	MPC			143	3		274	3	-1.		
1464-	MPC			143	4		274	4	-1.		
1465-	MPC			143	5		274	5	-1.		
1466-	MPC			144	1		275	1	-1.		
1467-	MPC			144	2		275	2	-1.		
1468-	MPC			144	3		275	3	-1.		
1469-	MPC			144	4		275	4	-1.		
1470-	MPC			144	5		275	5	-1.		
1471-	MPC			145	1		276	1	-1.		
1472-	MPC			145	2		276	2	-1.		
1473-	MPC			145	3		276	3	-1.		
1474-	MPC			145	4		276	4	-1.		
1475-	MPC			145	5		276	5	-1.		
1476-	MPC			146	1		277	1	-1.		
1477-	MPC			146	2		277	2	-1.		
1478-	MPC			146	3		277	3	-1.		
1479-	MPC			146	4		277	4	-1.		
1480-	MPC			146	5		277	5	-1.		
1481-	MPC			147	1		278	1	-1.		
1482-	MPC			147	2		278	2	-1.		
1483-	MPC			147	3		278	3	-1.		
1484-	MPC			147	4		278	4	-1.		
1485-	MPC			147	5		278	5	-1.		
1486-	MPC			148	1		279	1	-1.		
1487-	MPC			148	2		279	2	-1.		
1488-	MPC			148	3		279	3	-1.		
1489-	MPC			148	4		279	4	-1.		
1490-	MPC			148	5		279	5	-1.		
1491-	MPC			149	1		280	1	-1.		
1492-	MPC			149	2		280	2	-1.		
1493-	MPC			149	3		280	3	-1.		
1494-	MPC			149	4		280	4	-1.		
1495-	MPC			149	5		280	5	-1.		
1496-	MPC			150	1		281	1	-1.		
1497-	MPC			150	2		281	2	-1.		
1498-	MPC			150	3		281	3	-1.		
1499-	MPC			150	4		281	4	-1.		
1500-	MPC			150	4		281	4	-1.		

CARD	1	2	3	4	5	6	7	8	9	10
1501	PC		1	5		2	5			
1502	PC		1	5		2	5			
1503	PC		1	5		2	5			
1504	PC		1	5		2	5			
1505	PC		1	5		2	5			
1506	PC		1	5		2	5			
1507	PC		1	5		2	5			
1508	PC		1	5		2	5			
1509	PC		1	5		2	5			
1510	PC		1	5		2	5			
1511	PC		1	5		2	5			
1512	PC		1	5		2	5			
1513	PC		1	5		2	5			
1514	PC		1	5		2	5			
1515	PC		1	5		2	5			
1516	PC		1	5		2	5			
1517	PC		1	5		2	5			
1518	PC		1	5		2	5			
1519	PC		1	5		2	5			
1520	PC		1	5		2	5			
1521	PC		1	5		2	5			
1522	PC		1	5		2	5			
1523	PC		1	5		2	5			
1524	PC		1	5		2	5			
1525	PC		1	5		2	5			
1526	PC		1	5		2	5			
1527	PC		1	5		2	5			
1528	PC		1	5		2	5			
1529	PC		1	5		2	5			
1530	PC		1	5		2	5			
1531	PC		1	5		2	5			
1532	PC		1	5		2	5			
1533	PC		1	5		2	5			
1534	PC		1	5		2	5			
1535	PC		1	5		2	5			
1536	PC		1	5		2	5			
1537	PC		1	5		2	5			
1538	PC		1	5		2	5			
1539	PC		1	5		2	5			
1540	PC		1	5		2	5			
1541	PC		1	5		2	5			
1542	PC		1	5		2	5			
1543	PC		1	5		2	5			
1544	PC		1	5		2	5			
1545	PC		1	5		2	5			
1546	PC		1	5		2	5			
1547	PC		1	5		2	5			
1548	PC		1	5		2	5			
1549	PC		1	5		2	5			
1550	PC		1	5		2	5			
1551	PC		1	5		2	5			
1552	PC		1	5		2	5			
1553	PC		1	5		2	5			
1554	PC		1	5		2	5			
1555	PC		1	5		2	5			
1556	PC		1	5		2	5			
1557	PC		1	5		2	5			
1558	PC		1	5		2	5			
1559	PC		1	5		2	5			
1560	PC		1	5		2	5			
1561	PC		1	5		2	5			
1562	PC		1	5		2	5			
1563	PC		1	5		2	5			
1564	PC		1	5		2	5			
1565	PC		1	5		2	5			
1566	PC		1	5		2	5			
1567	PC		1	5		2	5			
1568	PC		1	5		2	5			
1569	PC		1	5		2	5			
1570	PC		1	5		2	5			
1571	PC		1	5		2	5			
1572	PC		1	5		2	5			
1573	PC		1	5		2	5			
1574	PC		1	5		2	5			
1575	PC		1	5		2	5			
1576	PC		1	5		2	5			
1577	PC		1	5		2	5			
1578	PC		1	5		2	5			
1579	PC		1	5		2	5			
1580	PC		1	5		2	5			
1581	PC		1	5		2	5			
1582	PC		1	5		2	5			
1583	PC		1	5		2	5			
1584	PC		1	5		2	5			
1585	PC		1	5		2	5			
1586	PC		1	5		2	5			
1587	PC		1	5		2	5			
1588	PC		1	5		2	5			
1589	PC		1	5		2	5			
1590	PC		1	5		2	5			
1591	PC		1	5		2	5			
1592	PC		1	5		2	5			
1593	PC		1	5		2	5			
1594	PC		1	5		2	5			
1595	PC		1	5		2	5			
1596	PC		1	5		2	5			
1597	PC		1	5		2	5			
1598	PC		1	5		2	5			
1599	PC		1	5		2	5			
1600	PC		1	5		2	5			

CARD COUNT		2	3	4	5	6	7	8	9	10
1601-	MPC		170	1	1	01	1	1		
1602-	MPC		171	1	1	02	1	1		
1603-	MPC		171	2	1	02	1	1		
1604-	MPC		171	3	1	02	1	1		
1605-	MPC		171	4	1	02	1	1		
1606-	MPC		171	5	1	02	1	1		
1607-	MPC		172	1	1	03	1	1		
1608-	MPC		172	2	1	03	1	1		
1609-	MPC		172	3	1	03	1	1		
1610-	MPC		172	4	1	03	1	1		
1611-	MPC		172	5	1	03	1	1		
1612-	MPC		173	1	1	04	1	1		
1613-	MPC		173	2	1	04	1	1		
1614-	MPC		173	3	1	04	1	1		
1615-	MPC		173	4	1	04	1	1		
1616-	MPC		173	5	1	04	1	1		
1617-	MPC		174	1	1	05	1	1		
1618-	MPC		174	2	1	05	1	1		
1619-	MPC		174	3	1	05	1	1		
1620-	MPC		174	4	1	05	1	1		
1621-	MPC		174	5	1	05	1	1		
1622-	MPC		176	1	1	07	1	1		
1623-	MPC		176	2	1	07	1	1		
1624-	MPC		176	3	1	07	1	1		
1625-	MPC		176	4	1	07	1	1		
1626-	MPC		176	5	1	07	1	1		
1627-	MPC		177	1	1	08	1	1		
1628-	MPC		177	2	1	08	1	1		
1629-	MPC		177	3	1	08	1	1		
1630-	MPC		177	4	1	08	1	1		
1631-	MPC		177	5	1	08	1	1		
1632-	MPC		178	1	1	09	1	1		
1633-	MPC		178	2	1	09	1	1		
1634-	MPC		178	3	1	09	1	1		
1635-	MPC		178	4	1	09	1	1		
1636-	MPC		178	5	1	09	1	1		
1637-	MPC		179	1	1	10	1	1		
1638-	MPC		179	2	1	10	1	1		
1639-	MPC		179	3	1	10	1	1		
1640-	MPC		179	4	1	10	1	1		
1641-	MPC		179	5	1	10	1	1		
1642-	MPC		180	1	1	11	1	1		
1643-	MPC		180	2	1	11	1	1		
1644-	MPC		180	3	1	11	1	1		
1645-	MPC		180	4	1	11	1	1		
1646-	MPC		180	5	1	11	1	1		
1647-	MPC		181	1	1	12	1	1		
1648-	MPC		181	2	1	12	1	1		
1649-	MPC		181	3	1	12	1	1		
1650-	MPC		181	4	1	12	1	1		
1651-	MPC		181	5	1	12	1	1		
1652-	MPC		182	1	1	13	1	1		
1653-	MPC		182	2	1	13	1	1		
1654-	MPC		182	3	1	13	1	1		
1655-	MPC		182	4	1	13	1	1		
1656-	MPC		182	5	1	13	1	1		
1657-	MPC		183	1	1	14	1	1		
1658-	MPC		183	2	1	14	1	1		
1659-	MPC		183	3	1	14	1	1		
1660-	MPC		183	4	1	14	1	1		
1661-	MPC		183	5	1	14	1	1		
1662-	MPC		184	1	1	15	1	1		
1663-	MPC		184	2	1	15	1	1		
1664-	MPC		184	3	1	15	1	1		
1665-	MPC		184	4	1	15	1	1		
1666-	MPC		184	5	1	15	1	1		
1667-	MPC		185	1	1	16	1	1		
1668-	MPC		185	2	1	16	1	1		
1669-	MPC		185	3	1	16	1	1		
1670-	MPC		185	4	1	16	1	1		
1671-	MPC		185	5	1	16	1	1		
1672-	MPC		186	1	1	17	1	1		
1673-	MPC		186	2	1	17	1	1		
1674-	MPC		186	3	1	17	1	1		
1675-	MPC		186	4	1	17	1	1		
1676-	MPC		186	5	1	17	1	1		
1677-	MPC		187	1	1	18	1	1		
1678-	MPC		187	2	1	18	1	1		
1679-	MPC		187	3	1	18	1	1		
1680-	MPC		187	4	1	18	1	1		
1681-	MPC		187	5	1	18	1	1		
1682-	MPC		188	1	1	19	1	1		
1683-	MPC		188	2	1	19	1	1		
1684-	MPC		188	3	1	19	1	1		
1685-	MPC		188	4	1	19	1	1		
1686-	MPC		188	5	1	19	1	1		
1687-	MPC		189	1	1	20	1	1		
1688-	MPC		189	2	1	20	1	1		
1689-	MPC		189	3	1	20	1	1		
1690-	MPC		189	4	1	20	1	1		
1691-	MPC		189	5	1	20	1	1		
1692-	MPC		190	1	1	21	1	1		
1693-	MPC		190	2	1	21	1	1		
1694-	MPC		190	3	1	21	1	1		
1695-	MPC		190	4	1	21	1	1		
1696-	MPC		190	5	1	21	1	1		
1697-	MPC		191	1	1	22	1	1		
1698-	MPC		191	2	1	22	1	1		
1699-	MPC		191	3	1	22	1	1		
1699-	MPC		191	4	1	22	1	1		

CARD COUNT	1	2	3	4	5	6	7	8	9
1701-	MPC	.	191	5	1	322	5	1	
1702-	MPC	1	192	1	1	323	1	1	
1703-	MPC	1	192	2	1	323	2	1	
1704-	MPC	1	192	4	1	323	4	1	
1705-	MPC	1	192	4	1	323	4	1	
1706-	MPC	1	192	5	1	323	5	1	
1707-	MPC	1	193	1	1	324	1	1	
1708-	MPC	1	193	5	1	324	5	1	
1709-	MPC	1	193	4	1	324	4	1	
1710-	MPC	1	193	4	1	324	4	1	
1711-	MPC	1	193	5	1	324	5	1	
1712-	MPC	1	194	1	1	325	1	1	
1713-	MPC	1	194	2	1	325	2	1	
1714-	MPC	1	194	3	1	325	3	1	
1715-	MPC	1	194	4	1	325	4	1	
1716-	MPC	1	194	5	1	325	5	1	
1717-	MPC	1	195	1	1	326	1	1	
1718-	MPC	1	195	2	1	326	2	1	
1719-	MPC	1	195	3	1	326	3	1	
1720-	MPC	1	195	4	1	326	4	1	
1721-	MPC	1	195	5	1	326	5	1	
1722-	MPC	1	196	1	1	327	1	1	
1723-	MPC	1	196	2	1	327	2	1	
1724-	MPC	1	196	3	1	327	3	1	
1725-	MPC	1	196	4	1	327	4	1	
1726-	MPC	1	196	5	1	327	5	1	
1727-	MPC	1	197	1	1	328	1	1	
1728-	MPC	1	197	2	1	328	2	1	
1729-	MPC	1	197	4	1	328	4	1	
1730-	MPC	1	197	5	1	328	5	1	
1731-	MPC	1	198	1	1	329	1	1	
1732-	MPC	1	198	2	1	329	2	1	
1733-	MPC	1	198	3	1	329	3	1	
1734-	MPC	1	198	4	1	329	4	1	
1735-	MPC	1	198	5	1	329	5	1	
1736-	MPC	1	199	1	1	330	1	1	
1737-	MPC	1	199	2	1	330	2	1	
1738-	MPC	1	199	3	1	330	3	1	
1739-	MPC	1	199	4	1	330	4	1	
1740-	MPC	1	199	5	1	330	5	1	
1741-	MPC	1	200	1	1	331	1	1	
1742-	MPC	1	200	2	1	331	2	1	
1743-	MPC	1	200	3	1	331	3	1	
1744-	MPC	1	200	4	1	331	4	1	
1745-	MPC	1	200	5	1	331	5	1	
1746-	MPC	1	201	1	1	332	1	1	
1747-	MPC	1	201	2	1	332	2	1	
1748-	MPC	1	201	3	1	332	3	1	
1749-	MPC	1	201	4	1	332	4	1	
1750-	MPC	1	201	5	1	332	5	1	
1751-	MPC	1	202	1	1	333	1	1	
1752-	MPC	1	202	2	1	333	2	1	
1753-	MPC	1	202	3	1	333	3	1	
1754-	MPC	1	202	4	1	333	4	1	
1755-	MPC	1	202	5	1	333	5	1	
1756-	MPC	1	203	1	1	334	1	1	
1757-	MPC	1	203	2	1	334	2	1	
1758-	MPC	1	203	3	1	334	3	1	
1759-	MPC	1	203	4	1	334	4	1	
1760-	MPC	1	203	5	1	334	5	1	
1761-	MPC	1	204	1	1	335	1	1	
1762-	MPC	1	204	2	1	335	2	1	
1763-	MPC	1	204	3	1	335	3	1	
1764-	MPC	1	204	4	1	335	4	1	
1765-	MPC	1	204	5	1	335	5	1	
1766-	MPC	1	205	1	1	336	1	1	
1767-	MPC	1	205	2	1	336	2	1	
1768-	MPC	1	205	3	1	336	3	1	
1769-	MPC	1	205	4	1	336	4	1	
1770-	MPC	1	205	5	1	336	5	1	
1771-	MPC	1	206	1	1	337	1	1	
1772-	MPC	1	206	2	1	337	2	1	
1773-	MPC	1	206	3	1	337	3	1	
1774-	MPC	1	206	4	1	337	4	1	
1775-	MPC	1	206	5	1	337	5	1	
1776-	MPC	1	207	1	1	338	1	1	
1777-	MPC	1	207	2	1	338	2	1	
1778-	MPC	1	207	3	1	338	3	1	
1779-	MPC	1	207	4	1	338	4	1	
1780-	MPC	1	207	5	1	338	5	1	
1781-	MPC	1	208	1	1	339	1	1	
1782-	MPC	1	208	2	1	339	2	1	
1783-	MPC	1	208	3	1	339	3	1	
1784-	MPC	1	208	4	1	339	4	1	
1785-	MPC	1	208	5	1	339	5	1	
1786-	MPC	1	209	1	1	340	1	1	
1787-	MPC	1	209	2	1	340	2	1	
1788-	MPC	1	209	3	1	340	3	1	
1789-	MPC	1	209	4	1	340	4	1	
1790-	MPC	1	209	5	1	340	5	1	
1791-	MPC	1	210	1	1	341	1	1	
1792-	MPC	1	210	2	1	341	2	1	
1793-	MPC	1	210	3	1	341	3	1	
1794-	MPC	1	210	4	1	341	4	1	
1795-	MPC	1	210	5	1	341	5	1	
1796-	MPC	1	211	1	1	342	1	1	
1797-	MPC	1	211	2	1	342	2	1	
1798-	MPC	1	211	3	1	342	3	1	
1799-	MPC	1	211	4	1	342	4	1	
1800-	MPC	1	211	5	1	342	5	1	

CARD		S	O	R	T	E	D	B	U	L	K	D	A	T	A	E	C	H	O
COUNT		1	2	3	4	5	6	7	8	9	10								
1801-	MPC			211	1						342								
1802-	MPC			212	1						343								
1803-	MPC			212	1						343								
1804-	MPC			212	1						343								
1805-	MPC			212	5						343								
1806-	MPC			213	1						344								
1807-	MPC			213	1						344								
1808-	MPC			213	1						344								
1809-	MPC			213	3						344								
1810-	MPC			213	4						344								
1811-	MPC			213	5						344								
1812-	MPC			214	1						345								
1813-	MPC			214	2						345								
1814-	MPC			214	3						345								
1815-	MPC			214	4						345								
1816-	MPC			214	5						345								
1817-	MPC			215	1						346								
1818-	MPC			215	2						346								
1819-	MPC			215	3						346								
1820-	MPC			215	4						346								
1821-	MPC			215	5						346								
1822-	MPC			216	1						347								
1823-	MPC			216	2						347								
1824-	MPC			216	3						347								
1825-	MPC			216	4						347								
1826-	MPC			216	5						347								
1827-	MPC			217	1						348								
1828-	MPC			217	2						348								
1829-	MPC			217	3						348								
1830-	MPC			217	4						348								
1831-	MPC			217	5						348								
1832-	MPC			218	1						349								
1833-	MPC			218	2						349								
1834-	MPC			218	3						349								
1835-	MPC			218	4						349								
1836-	MPC			218	5						349								
1837-	MPC			219	1						350								
1838-	MPC			219	2						350								
1839-	MPC			219	3						350								
1840-	MPC			219	4						350								
1841-	MPC			219	5						350								
1842-	MPC			220	1						351								
1843-	MPC			220	2						351								
1844-	MPC			220	3						351								
1845-	MPC			220	4						351								
1846-	MPC			220	5						351								
1847-	MPC			221	1						352								
1848-	MPC			221	2						352								
1849-	MPC			221	3						352								
1850-	MPC			221	4						352								
1851-	MPC			221	5						352								
1852-	MPC			222	1						353								
1853-	MPC			222	2						353								
1854-	MPC			222	3						353								
1855-	MPC			222	4						353								
1856-	MPC			222	5						353								
1857-	MPC			223	1						354								
1858-	MPC			223	2						354								
1859-	MPC			223	3						354								
1860-	MPC			223	4						354								
1861-	MPC			223	5						354								
1862-	MPC			224	1						355								
1863-	MPC			224	2						355								
1864-	MPC			224	3						355								
1865-	MPC			224	4						355								
1866-	MPC			224	5						355								
1867-	MPC			226	1						357								
1868-	MPC			226	2						357								
1869-	MPC			226	3						357								
1870-	MPC			226	4						357								
1871-	MPC			226	5						357								
1872-	MPC			227	1						358								
1873-	MPC			227	2						358								
1874-	MPC			227	3						358								
1875-	MPC			227	4						358								
1876-	MPC			227	5						358								
1877-	MPC			228	1						359								
1878-	MPC			228	2						359								
1879-	MPC			228	3						359								
1880-	MPC			228	4						359								
1881-	MPC			228	5						359								
1882-	MPC			229	1						360								
1883-	MPC			229	2						360								
1884-	MPC			229	3						360								
1885-	MPC			229	4						360								
1886-	MPC			229	5						360								
1887-	MPC			230	1						361								
1888-	MPC			230	2						361								
1889-	MPC			230	3						361								
1890-	MPC			230	4						361								
1891-	MPC			230	5						361								
1892-	MPC			231	1						362								
1893-	MPC			231	2						362								
1894-	MPC			231	3						362								
1895-	MPC			231	4						362								
1896-	MPC			231	5						362								
1897-	MPC			232	1						363								
1898-	MPC			232	2						363								
1899-	MPC			232	3						363								
1900-	MPC			232	4						363								

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1301-	MPC	232	5	1	1	363	5	1	1	1
1302-	MPC	233	2	1	1	364	1	1	1	1
1303-	MPC	233	2	1	1	364	2	1	1	1
1304-	MPC	233	3	1	1	364	3	1	1	1
1305-	MPC	233	4	1	1	364	4	1	1	1
1306-	MPC	233	5	1	1	364	5	1	1	1
1307-	MPC	234	1	1	1	365	1	1	1	1
1308-	MPC	234	2	1	1	365	2	1	1	1
1309-	MPC	234	3	1	1	365	3	1	1	1
1310-	MPC	234	4	1	1	365	4	1	1	1
1311-	MPC	234	5	1	1	365	5	1	1	1
1312-	MPC	235	1	1	1	366	1	1	1	1
1313-	MPC	235	2	1	1	366	2	1	1	1
1314-	MPC	235	3	1	1	366	3	1	1	1
1315-	MPC	235	4	1	1	366	4	1	1	1
1316-	MPC	235	5	1	1	366	5	1	1	1
1317-	MPC	236	1	1	1	367	1	1	1	1
1318-	MPC	236	2	1	1	367	2	1	1	1
1319-	MPC	236	3	1	1	367	3	1	1	1
1320-	MPC	236	4	1	1	367	4	1	1	1
1321-	MPC	236	5	1	1	367	5	1	1	1
1322-	MPC	237	1	1	1	368	1	1	1	1
1323-	MPC	237	2	1	1	368	2	1	1	1
1324-	MPC	237	3	1	1	368	3	1	1	1
1325-	MPC	237	4	1	1	368	4	1	1	1
1326-	MPC	237	5	1	1	368	5	1	1	1
1327-	MPC	238	1	1	1	369	1	1	1	1
1328-	MPC	238	2	1	1	369	2	1	1	1
1329-	MPC	238	3	1	1	369	3	1	1	1
1330-	MPC	238	4	1	1	369	4	1	1	1
1331-	MPC	238	5	1	1	369	5	1	1	1
1332-	MPC	239	1	1	1	370	1	1	1	1
1333-	MPC	239	2	1	1	370	2	1	1	1
1334-	MPC	239	3	1	1	370	3	1	1	1
1335-	MPC	239	4	1	1	370	4	1	1	1
1336-	MPC	239	5	1	1	370	5	1	1	1
1337-	MPC	240	1	1	1	371	1	1	1	1
1338-	MPC	240	2	1	1	371	2	1	1	1
1339-	MPC	240	3	1	1	371	3	1	1	1
1340-	MPC	240	4	1	1	371	4	1	1	1
1341-	MPC	240	5	1	1	371	5	1	1	1
1342-	MPC	241	1	1	1	372	1	1	1	1
1343-	MPC	241	2	1	1	372	2	1	1	1
1344-	MPC	241	3	1	1	372	3	1	1	1
1345-	MPC	241	4	1	1	372	4	1	1	1
1346-	MPC	241	5	1	1	372	5	1	1	1
1347-	MPC	242	1	1	1	373	1	1	1	1
1348-	MPC	242	2	1	1	373	2	1	1	1
1349-	MPC	242	3	1	1	373	3	1	1	1
1350-	MPC	242	4	1	1	373	4	1	1	1
1351-	MPC	242	5	1	1	373	5	1	1	1
1352-	MPC	243	1	1	1	374	1	1	1	1
1353-	MPC	243	2	1	1	374	2	1	1	1
1354-	MPC	243	3	1	1	374	3	1	1	1
1355-	MPC	243	4	1	1	374	4	1	1	1
1356-	MPC	243	5	1	1	374	5	1	1	1
1357-	MPC	244	1	1	1	375	1	1	1	1
1358-	MPC	244	2	1	1	375	2	1	1	1
1359-	MPC	244	3	1	1	375	3	1	1	1
1360-	MPC	244	4	1	1	375	4	1	1	1
1361-	MPC	244	5	1	1	375	5	1	1	1
1362-	MPC	245	1	1	1	376	1	1	1	1
1363-	MPC	245	2	1	1	376	2	1	1	1
1364-	MPC	245	3	1	1	376	3	1	1	1
1365-	MPC	245	4	1	1	376	4	1	1	1
1366-	MPC	245	5	1	1	376	5	1	1	1
1367-	MPC	246	1	1	1	377	1	1	1	1
1368-	MPC	246	2	1	1	377	2	1	1	1
1369-	MPC	246	3	1	1	377	3	1	1	1
1370-	MPC	246	4	1	1	377	4	1	1	1
1371-	MPC	246	5	1	1	377	5	1	1	1
1372-	MPC	247	1	1	1	378	1	1	1	1
1373-	MPC	247	2	1	1	378	2	1	1	1
1374-	MPC	247	3	1	1	378	3	1	1	1
1375-	MPC	247	4	1	1	378	4	1	1	1
1376-	MPC	247	5	1	1	378	5	1	1	1
1377-	MPC	248	1	1	1	379	1	1	1	1
1378-	MPC	248	2	1	1	379	2	1	1	1
1379-	MPC	248	3	1	1	379	3	1	1	1
1380-	MPC	248	4	1	1	379	4	1	1	1
1381-	MPC	248	5	1	1	379	5	1	1	1
1382-	MPC	249	1	1	1	380	1	1	1	1
1383-	MPC	249	2	1	1	380	2	1	1	1
1384-	MPC	249	3	1	1	380	3	1	1	1
1385-	MPC	249	4	1	1	380	4	1	1	1
1386-	MPC	249	5	1	1	380	5	1	1	1
1387-	MPC	250	1	1	1	381	1	1	1	1
1388-	MPC	250	2	1	1	381	2	1	1	1
1389-	MPC	250	3	1	1	381	3	1	1	1
1390-	MPC	250	4	1	1	381	4	1	1	1
1391-	MPC	250	5	1	1	381	5	1	1	1
1392-	MPC	251	1	1	1	382	1	1	1	1
1393-	MPC	251	2	1	1	382	2	1	1	1
1394-	MPC	251	3	1	1	382	3	1	1	1
1395-	MPC	251	4	1	1	382	4	1	1	1
1396-	MPC	251	5	1	1	382	5	1	1	1
1397-	MPC	252	1	1	1	383	1	1	1	1
1398-	MPC	252	2	1	1	383	2	1	1	1
1399-	MPC	252	3	1	1	383	3	1	1	1
2000-	MPC	252	4	1	1	383	4	1	1	1

CARD COUNT	1	2	3	4	5	6	7	8	9	10
2001-	MPC	3	252	5	1	383	5	1		
2002-	MPC	3	253	1	1	384	1	1		
2003-	MPC	3	253	1	1	384	2	1		
2004-	MPC	3	253	3	1	384	3	1		
2005-	MPC	3	253	4	1	384	4	1		
2006-	MPC	3	253	5	1	384	5	1		
2007-	MPC	3	254	1	1	385	1	1		
2008-	MPC	3	254	2	1	385	2	1		
2009-	MPC	3	254	3	1	385	3	1		
2010-	MPC	3	254	4	1	385	4	1		
2011-	MPC	3	254	5	1	385	5	1		
2012-	MPC	3	255	1	1	386	1	1		
2013-	MPC	3	255	2	1	386	2	1		
2014-	MPC	3	255	3	1	386	3	1		
2015-	MPC	3	255	4	1	386	4	1		
2016-	MPC	3	255	5	1	386	5	1		
2017-	MPC	3	256	1	1	387	1	1		
2018-	MPC	3	256	2	1	387	2	1		
2019-	MPC	3	256	3	1	387	3	1		
2020-	MPC	3	256	4	1	387	4	1		
2021-	MPC	3	256	5	1	387	5	1		
2022-	MPC	3	257	1	1	388	1	1		
2023-	MPC	3	257	2	1	388	2	1		
2024-	MPC	3	257	3	1	388	3	1		
2025-	MPC	3	257	4	1	388	4	1		
2026-	MPC	3	257	5	1	388	5	1		
2027-	MPC	3	258	1	1	389	1	1		
2028-	MPC	3	258	2	1	389	2	1		
2029-	MPC	3	258	3	1	389	3	1		
2030-	MPC	3	258	4	1	389	4	1		
2031-	MPC	3	258	5	1	389	5	1		
2032-	MPC	3	259	1	1	390	1	1		
2033-	MPC	3	259	2	1	390	2	1		
2034-	MPC	3	259	3	1	390	3	1		
2035-	MPC	3	259	4	1	390	4	1		
2036-	MPC	3	259	5	1	390	5	1		
2037-	MPC	3	260	1	1	391	1	1		
2038-	MPC	3	260	2	1	391	2	1		
2039-	MPC	3	260	3	1	391	3	1		
2040-	MPC	3	260	4	1	391	4	1		
2041-	MPC	3	260	5	1	391	5	1		
2042-	MPC	3	261	1	1	392	1	1		
2043-	MPC	3	261	2	1	392	2	1		
2044-	MPC	3	261	3	1	392	3	1		
2045-	MPC	3	261	4	1	392	4	1		
2046-	MPC	3	261	5	1	392	5	1		
2047-	MPC	3	262	1	1	393	1	1		
2048-	MPC	3	262	2	1	393	2	1		
2049-	MPC	3	262	3	1	393	3	1		
2050-	MPC	3	262	4	1	393	4	1		
2051-	MPC	3	262	5	1	393	5	1		
2052-	MPC	3	263	1	1	394	1	1		
2053-	MPC	3	263	2	1	394	2	1		
2054-	MPC	3	263	3	1	394	3	1		
2055-	MPC	3	263	4	1	394	4	1		
2056-	MPC	3	263	5	1	394	5	1		
2057-	MPC	3	264	1	1	395	1	1		
2058-	MPC	3	264	2	1	395	2	1		
2059-	MPC	3	264	3	1	395	3	1		
2060-	MPC	3	264	4	1	395	4	1		
2061-	MPC	3	264	5	1	395	5	1		
2062-	PBEAM	4	19	.059	4	502E-31	.873E-5	.00452		
2063-	PBEAM	9	19	.1198	2	094E-3	.0683	.06832		
2064-	PLOAD1	100	1		1	0.	-1.	2.5	-1.	2.5
2065-	PLOAD1	100	2		1	0.	-1.	2.5	-1.	2.5
2066-	PLOAD1	100	3		1	0.	-1.	2.5	-1.	2.5
2067-	PLOAD1	100	4		1	0.	-1.	2.5	-1.	2.5
2068-	PLOAD1	100	5		1	0.	-1.	2.5	-1.	2.5
2069-	PLOAD1	100	6		1	0.	-1.	2.5	-1.	2.5
2070-	PLOAD1	100	7		1	0.	-1.	2.5	-1.	2.5
2071-	PLOAD1	100	8		1	0.	-1.	2.5	-1.	2.5
2072-	PLOAD1	100	9		1	0.	-1.	2.5	-1.	2.5
2073-	PLOAD1	100	10		1	0.	-1.	2.5	-1.	2.5
2074-	PLOAD1	100	11		1	0.	-1.	2.5	-1.	2.5
2075-	PLOAD1	100	12		1	0.	-1.	2.5	-1.	2.5
2076-	PLOAD1	100	13		1	0.	-1.	2.5	-1.	2.5
2077-	PLOAD1	100	14		1	0.	-1.	2.5	-1.	2.5
2078-	PLOAD1	100	15		1	0.	-1.	2.5	-1.	2.5
2079-	PLOAD1	100	16		1	0.	-1.	2.5	-1.	2.5
2080-	PLOAD1	100	17		1	0.	-1.	2.5	-1.	2.5
2081-	PLOAD1	100	18		1	0.	-1.	2.5	-1.	2.5
2082-	PLOAD1	100	19		1	0.	-1.	2.5	-1.	2.5
2083-	PLOAD1	100	20		1	0.	-1.	2.5	-1.	2.5
2084-	PLOAD1	100	21		1	0.	-1.	2.5	-1.	2.5
2085-	PLOAD1	100	22		1	0.	-1.	2.5	-1.	2.5
2086-	PLOAD1	100	23		1	0.	-1.	2.5	-1.	2.5
2087-	PLOAD1	100	24		1	0.	-1.	2.5	-1.	2.5
2088-	PLOAD1	100	25		1	0.	-1.	2.5	-1.	2.5
2089-	PLOAD1	100	26		1	0.	-1.	2.5	-1.	2.5
2090-	PLOAD1	100	27		1	0.	-1.	2.5	-1.	2.5
2091-	PLOAD1	100	28		1	0.	-1.	2.5	-1.	2.5
2092-	PLOAD1	100	29		1	0.	-1.	2.5	-1.	2.5
2093-	PLOAD1	100	30		1	0.	-1.	2.5	-1.	2.5
2094-	PLOAD1	100	31		1	0.	-1.	2.5	-1.	2.5
2095-	PLOAD1	100	32		1	0.	-1.	2.5	-1.	2.5
2096-	PLOAD1	100	33		1	0.	-1.	2.5	-1.	2.5
2097-	PLOAD1	100	34		1	0.	-1.	2.5	-1.	2.5
2098-	PLOAD1	100	35		1	0.	-1.	2.5	-1.	2.5
2099-	PLOAD1	100	36		1	0.	-1.	2.5	-1.	2.5
2100-	PLOAD1	100	37		1	0.	-1.	2.5	-1.	2.5

APPENDIX B

The Input Data of the Connections for MSC/NASTRAN

Input Data for Butt Joint Using Plate Element Model

N A S T R A N E X E C U T I V E C O N T R O L D E C K E C H O

```
ID TEST,PILOT1
SOL 24
TIME 30
CEND
```

C A S E C O N T R O L D E C K E C H O

```
CARD
COUNT
1        TITLE=PILOT TEST USING PLANE STRESS
2        SUBTITLE=COMP. + STRUCTURES VOL.21 NO.3,PS01-511,1985
3        DISPLACEMENT=ALL
4        STRESS=ALL
5        ELFORCE=ALL
6        LOAD=100
7        BEGIN BULK

          INPUT BULK DATA CARD COUNT =     100
```

CAHD COUNT	1	2	3	4	5	6	7	8	9	10
1-	CQUAD4	1	99	1	3	6	2			
2-	CQUAD4	2	99	3	7	8	4			
3-	CQUAD4	3	99	5	7	8	6			
4-	CQUAD4	4	99	7	9	10	8			
5-	CQUAD4	5	99	11	11	12	10			
6-	CQUAD4	6	99	13	13	14	12			
7-	CQUAD4	7	99	15	15	16	14			
8-	CQUAD4	8	99	17	17	18	16			
9-	CQUAD4	9	99	19	19	20	18			
10-	CQUAD4	10	99	21	21	22	20			
11-	CQUAD4	11	99	23	23	24	22			
12-	CQUAD4	12	99	25	25	26	24			
13-	CQUAD4	13	99	27	27	28	26			
14-	CQUAD4	14	99	29	29	30	28			
15-	CQUAD4	15	99	31	31	32	30			
16-	CQUAD4	16	99	33	33	34	32			
17-	CQUAD4	17	99	35	35	36	34			
18-	CQUAD4	18	99	37	37	38	36			
19-	CQUAD4	19	99	39	39	40	38			
20-	CQUAD4	20	99	41	41	42	40			
21-	CQUAD4	21	99	43	43	44	42			
22-	CQUAD4	22	99	45	45	46	44			
23-	CQUAD4	23	99	47	47	48	46			
24-	CQUAD4	24	99	49	49	50	48			
25-	CROD	1	89	10	31	52	50			
26-	CROD	2	89	14	35					
27-	CROD	3	89	18	39					
28-	CROD	4	89	22	43					
29-	CROD	5	59	9	30					
30-	CROD	6	59	11	32					
31-	CROD	7	59	13	34					
32-	CROD	8	59	15	36					
33-	CROD	9	59	17	38					
34-	CROD	10	59	19	40					
35-	CROD	11	59	21	42					
36-	CROD	12	59	23	44					
37-	FORCE	100	51		1.0	250.	0.	0.		
38-	FORCE	100	52		1.0	250.	0.	0.		
39-	GRDSET									
40-	GRID	1		0.0	0.0	0.	0.	3456		
41-	GRID	2		0.0	1.0	0.	0.	123450		
42-	GRID	3		2.17	0.0	0.	0.	123450		
43-	GRID	4		2.17	1.0	0.	0.	23456		
44-	GRID	5		4.33	0.0	0.	0.	23456		
45-	GRID	6		4.33	1.0	0.	0.	23456		
46-	GRID	7		6.5	0.0	0.	0.	23456		
47-	GRID	8		6.5	1.0	0.	0.	23456		
48-	GRID	9		9.0	0.0	0.	0.	23456		
49-	GRID	10		9.0	1.0	0.	0.	23456		
50-	GRID	11		9.875	0.0	0.	0.	23456		
51-	GRID	12		9.875	1.0	0.	0.	23456		
52-	GRID	13		13.375	0.0	0.	0.	23456		
53-	GRID	14		13.375	1.0	0.	0.	23456		
54-	GRID	15		14.25	0.0	0.	0.	23456		
55-	GRID	16		14.25	1.0	0.	0.	23456		
56-	GRID	17		17.75	0.0	0.	0.	23456		
57-	GRID	18		17.75	1.0	0.	0.	23456		
58-	GRID	19		18.625	0.0	0.	0.	23456		
59-	GRID	20		18.625	1.0	0.	0.	23456		
60-	GRID	21		22.125	0.0	0.	0.	23456		
61-	GRID	22		22.125	1.0	0.	0.	23456		
62-	GRID	23		23.0	0.0	0.	0.	23456		
63-	GRID	24		23.0	1.0	0.	0.	23456		
64-	GRID	25		25.5	0.0	0.	0.	23456		
65-	GRID	26		25.5	1.0	0.	0.	23456		
66-	GRID	27		6.5	1.0	0.	0.	23456		
67-	GRID	28		6.5	1.0	0.	0.	23456		
68-	GRID	29		9.0	1.0	0.	0.	23456		
69-	GRID	30		9.0	2.0	0.	0.	23456		
70-	GRID	31		9.875	1.0	0.	0.	23456		
71-	GRID	32		9.875	2.0	0.	0.	23456		
72-	GRID	33		13.375	1.0	0.	0.	23456		
73-	GRID	34		13.375	2.0	0.	0.	23456		
74-	GRID	35		14.25	1.0	0.	0.	23456		
75-	GRID	36		14.25	2.0	0.	0.	23456		
76-	GRID	37		17.75	1.0	0.	0.	23456		
77-	GRID	38		17.75	2.0	0.	0.	23456		
78-	GRID	39		18.625	1.0	0.	0.	23456		
79-	GRID	40		18.625	2.0	0.	0.	23456		
80-	GRID	41		22.125	1.0	0.	0.	23456		
81-	GRID	42		22.125	2.0	0.	0.	23456		
82-	GRID	43		23.0	1.0	0.	0.	23456		
83-	GRID	44		23.0	2.0	0.	0.	23456		
84-	GRID	45		25.5	1.0	0.	0.	23456		
85-	GRID	46		25.5	2.0	0.	0.	23456		
86-	GRID	47		28.0	1.00	0.	0.	23456		
87-	GRID	48		28.0	2.0	0.	0.	23456		
88-	GRID	49		30.5	1.0	0.	0.	23456		
89-	GRID	50		30.5	2.0	0.	0.	23456		
90-	GRID	51		33.0	1.0	0.	0.	23456		
91-	GRID	52		33.0	2.0	0.	0.	23456		
92-	MAT1	49	7640.		0.3					
93-	MAT1	69	2009.		0.3					
94-	MAT1	79	2.357E+4		0.3					
95-	PROD	59	49	0.601	0.0576	1.0	0.1			
96-	PROD	89	69	1.202	0.1152	1.0	0.1			
97-	PSHELL	99	79	4.0						
	ENDDATA									

TOTAL COUNT: 98

Input Data for Butt Joint Using Solid Element Model

NASTRAN EXECUTIVE CONTROL DECK ECHO

```
ID TEST, PILOT2
SOL 20
TIME 60
CEND
```

```
CARD          .          CASE CONTROL DECK ECHO
COUNT
1             TITLE=PILOT TEST USING 3 DIMENSIONAL CONFIGURATION
2             SUBTITLE=COMPUTERS * STRUCTURES VOL.21 NO.3 P 501-511 , 1985
3             DISPLACEMENT=ALL
4             STRESS=ALL
5             ELEMENT=ALL
6             LOAD=10
7             BEGIN BULK _
              INPUT BULK DATA CARD COUNT =      207
```


CARD COUNT		1	2	3	4	5	6	7	8	9	10
1-	CHAR	1	19	20	103	104	104				
2-	CBAR	2	19	21	104	105	105				
3-	CBAR	3	19	22	105	106	106				
4-	CBAR	4	19	23	106	107	107				
5-	CBAR	5	19	24	107	108	108				
6-	CBAR	6	19	25	108	109	109				
7-	CBAR	7	19	26	109	110	110				
8-	CBAR	8	19	27	110	111	111				
9-	CHEXA	1	9	18	112	112	101				
10-	+A1	30	29	19	19	2	1	46	47	+A1	
11-	CHEXA	2	9	19	20	3	2	47	48	+A2	
12-	+A2	31	30	20	21	4	3	48	49	+A3	
13-	CHEXA	3	9	20	22	5	4	49	50	+A4	
14-	+A3	32	31	21	22	6	5	50	51	+A5	
15-	CHEXA	4	9	22	23	7	6	51	52	+A6	
16-	+A4	33	32	23	24	8	7	52	53	+A7	
17-	CHEXA	5	9	24	25	9	8	53	54	+A8	
18-	+A5	34	33	25	26	10	9	54	55	+A9	
19-	CAEXA	6	9	26	27	11	10	55	56	+A10	
20-	+A6	35	34	27	28	12	11	56	57	+A11	
21-	CHEXA	7	9	28	29	13	12	57	58	+A12	
22-	+A7	47	46	29	30	14	13	58	59	+A13	
23-	CHEXA	8	9	30	31	15	14	59	60	+A14	
24-	+A8	48	47	31	32	16	15	60	61	+A15	
25-	CHEXA	9	9	32	33	17	16	61	62	+A16	
26-	+A9	49	48	33	34	18	17	62	63	+A17	
27-	CHEXA	10	9	34	35	19	18	63	64	+A18	
28-	+A10	50	49	35	36	20	19	64	65	+A19	
29-	CHEXA	11	9	36	37	21	20	65	66	+A20	
30-	+A11	51	50	37	38	22	21	66	67	+A21	
31-	CHEXA	12	9	38	39	23	22	67	68	+A22	
32-	+A12	52	51	39	40	24	23	68	69	+A23	
33-	CHEXA	13	9	40	41	25	24	69	70	+A24	
34-	+A13	56	55	41	42	26	25	70	71	+A25	
35-	CHEXA	14	9	42	43	27	26	71	72	+A26	
36-	+A14	55	54	43	44	28	27	72	73	+A27	
37-	CHEXA	15	9	44	45	29	28	73	74	+A28	
38-	+A15	54	53	45	46	30	29	74	75	+A29	
39-	CHEXA	16	9	46	47	31	30	75	76	+A30	
40-	+A16	53	52	47	48	32	31	76	77	+A31	
41-	CHEXA	17	9	48	49	33	32	77	78	+A32	
42-	+A17	52	51	49	50	34	33	78	79	+A33	
43-	CHEXA	18	9	50	51	35	34	79	80	+A34	
44-	+A18	37	36	51	52	36	35	80	81	+A35	
45-	CHEXA	19	9	52	53	37	36	81	82	+A36	
46-	+A19	86	85	53	54	38	37	82	83		
47-	CHEXA	20	9	54	55	39	38	83	84		
48-	+A20	87	86	55	56	40	39	84	85		
49-	CHEXA	21	9	56	57	41	40	85	86		
50-	+A21	88	87	57	58	42	41	86	87		
51-	CHEXA	22	9	58	59	43	42	87	88		
52-	+A22	89	88	59	60	44	43	88	89		
53-	CHEXA	23	9	60	61	45	44	89	90		
54-	+A23	90	89	61	62	46	45	90	91		
55-	CHEXA	24	9	62	63	47	46	91	92		
56-	+A24	91	90	63	64	48	47	92	93		
57-	CHEXA	25	9	64	65	49	48	93	94		
58-	+A25	103	102	65	66	50	49	94	95		
59-	CHEXA	26	9	66	67	51	50	95	96		
60-	+A26	104	103	67	68	52	51	96	97		
61-	CHEXA	27	9	68	69	53	52	97	98		
62-	+A27	105	104	69	70	54	53	98	99		
63-	CHEXA	28	9	70	71	55	54	99	100		
64-	+A28	106	105	71	72	56	55	100	101		
65-	CHEXA	29	9	72	73	57	56	101	102		
66-	+A29	107	106	73	74	58	57	102	103		
67-	CHEXA	30	9	74	75	59	58	103	104		
68-	+A30	92	91	75	76	60	59	104	105		
69-	CHEXA	31	9	76	77	61	60	105	106		
70-	+A31	112	101	77	78	62	61	106	107		
71-	CHEXA	32	9	78	79	63	62	107	108		
72-	+A32	111	112	79	80	64	63	108	109		
73-	CHEXA	33	9	80	81	65	64	109	110		
74-	+A33	110	111	81	82	66	65	110	111		
75-	CHEXA	34	9	82	83	67	66	111	112		
76-	+A34	109	110	83	84	68	67	112	113		
77-	CHEXA	35	9	84	85	69	68	113	114		
78-	+A35	108	109	85	86	70	69	114	115		
79-	CHEXA	36	9	86	87	71	70	115	116		
80-	+A36	93	109	87	88	72	71	116	117		
81-	FORCE	10	63			31.25	1.0	0.0	0.0		
82-	FORCE	10	64			33.75	1.0	0.0	0.0		
83-	FORCE	10	65			33.75	1.0	0.0	0.0		
84-	FORCE	10	66			31.25	1.0	0.0	0.0		
85-	FORCE	10	91			31.25	1.0	0.0	0.0		
86-	FORCE	10	92			33.75	1.0	0.0	0.0		
87-	FORCE	10	93			33.75	1.0	0.0	0.0		
88-	FORCE	10	94			31.25	1.0	0.0	0.0		
89-	GRDSET							456			
90-	GRID	1		0.	0.	0.		123456			
91-	GRID	2		6.5	0.	0.		2456			
92-	GRID	3		9.43A	0.	0.		2456			
93-	GRID	4		13.812	0.	0.		2456			
94-	GRID	5		18.188	0.	0.		2456			
95-	GRID	6		22.5562	0.	0.		2456			
96-	GRID	7		25.5	0.	0.		2456			
97-	GRID	8		25.5	0.	1.		2456			
98-	GRID	9		25.5	0.	3.		2456			
99-	GRID	10		25.5	0.	4.		2456			
100-	GRID	11		22.562	0.	4.		2456			

CARD COUNT	1	2	3	4	5	6	7	8	9	10
101-	GRID	12		18.188	0.			2456		
102-	GRID	13		13.812	0.			2456		
103-	GRID	14		9.438	0.			2456		
104-	GRID	15		6.5	0.			2456		
105-	GRID	16		0.	0.			123456		
106-	GRID	17		0.	0.			123456		
107-	GRID	18		0.	0.			123456		
108-	GRID	19		6.5	0.			2456		
109-	GRID	20		9.438	0.			2456		
110-	GRID	21		13.812	0.			2456		
111-	GRID	22		18.188	0.			2456		
112-	GRID	23		22.562	0.			2456		
113-	GRID	24		22.562	0.			2456		
114-	GRID	25		18.188	0.			2456		
115-	GRID	26		13.812	0.			2456		
116-	GRID	27		9.438	0.			2456		
117-	GRID	28		6.5	0.			2456		
118-	GRID	29		0.	1.			2456		
119-	GRID	30		6.5	1.			123456		
120-	GRID	31		9.438	1.			0.		
121-	GRID	32		13.812	1.			0.		
122-	GRID	33		18.188	1.			0.		
123-	GRID	34		22.562	1.			0.		
124-	GRID	35		25.5	1.			0.		
125-	GRID	36		25.5	1.			1.		
126-	GRID	37		25.5	1.			3.		
127-	GRID	38		25.5	1.			4.		
128-	GRID	39		22.562	1.			4.		
129-	GRID	40		18.188	1.			4.		
130-	GRID	41		13.812	1.			4.		
131-	GRID	42		9.438	1.			4.		
132-	GRID	43		6.5	1.			4.		
133-	GRID	44		0.0	1.			123456		
134-	GRID	45		0.0	1.			123456		
135-	GRID	46		0.0	1.			123456		
136-	GRID	47		6.5	1.			1.		
137-	GRID	48		9.438	1.			1.		
138-	GRID	49		13.812	1.			1.		
139-	GRID	50		18.188	1.			1.		
140-	GRID	51		22.562	1.			1.		
141-	GRID	52		22.562	1.			3.		
142-	GRID	53		18.188	1.			3.		
143-	GRID	54		13.812	1.			3.		
144-	GRID	55		9.438	1.			3.		
145-	GRID	56		6.5	1.			3.		
146-	GRID	57		6.5	1.			0.		
147-	GRID	58		9.438	1.			0.		
148-	GRID	59		13.812	1.			0.		
149-	GRID	60		18.188	1.			0.		
150-	GRID	61		22.562	1.			0.		
151-	GRID	62		25.5	1.			0.		
152-	GRID	63		33.0	1.			0.		
153-	GRID	64		33.0	1.			0.		
154-	GRID	65		33.0	1.			1.		
155-	GRID	66		33.0	1.			3.		
156-	GRID	67		25.5	1.			4.		
157-	GRID	68		22.562	1.			4.		
158-	GRID	69		18.188	1.			4.		
159-	GRID	70		13.812	1.			4.		
160-	GRID	71		9.438	1.			4.		
161-	GRID	72		6.5	1.			4.		
162-	GRID	73		6.5	1.			3.		
163-	GRID	74		6.5	1.			1.		
164-	GRID	75		9.438	1.			1.		
165-	GRID	76		13.812	1.			1.		
166-	GRID	77		18.188	1.			1.		
167-	GRID	78		22.562	1.			1.		
168-	GRID	79		25.5	1.			1.		
169-	GRID	80		25.5	1.			3.		
170-	GRID	81		22.562	1.			3.		
171-	GRID	82		18.188	1.			3.		
172-	GRID	83		13.812	1.			3.		
173-	GRID	84		9.438	1.			3.		
174-	GRID	85		6.5	2.			0.		
175-	GRID	86		9.438	2.			0.		
176-	GRID	87		13.812	2.			0.		
177-	GRID	88		18.188	2.			0.		
178-	GRID	89		22.562	2.			0.		
179-	GRID	90		25.5	2.			0.		
180-	GRID	91		33.0	2.			0.		
181-	GRID	92		33.0	2.			1.		
182-	GRID	93		33.0	2.			3.		
183-	GRID	94		33.0	2.			4.		
184-	GRID	95		25.5	2.			4.		
185-	GRID	96		22.562	2.			4.		
186-	GRID	97		18.188	2.			4.		
187-	GRID	98		13.812	2.			4.		
188-	GRID	99		9.438	2.			4.		
189-	GRID	100		6.5	2.			4.		
190-	GRID	101		6.5	2.			3.		
191-	GRID	102		6.5	2.			3.		
192-	GRID	103		9.438	2.			1.		
193-	GRID	104		13.812	2.			1.		
194-	GRID	105		18.188	2.			1.		
195-	GRID	106		22.562	2.			1.		
196-	GRID	107		25.5	2.			1.		
197-	GRID	108		25.5	2.			3.		
198-	GRID	109		22.562	2.			3.		
199-	GRID	110		18.188	2.			3.		
200-	GRID	111		13.812	2.			3.		
201-	GRID	112		9.438	2.			3.		
202-	MATI	29	7640.		0.3					
203-	MATI	39	2.957E+4		0.3					
204-	PBAP	19		.601	0.0288	0.0288	0.0576			
205-	ESOLIDA	9			2					
	ENDDATA									

Input Data for Beam-to-Column Connection

Using Plate Element Model

```

      N A S T R A N   E X E C U T I V E   C O N T R O L   D E C K   E C H O

ID TEST.1101
SOL 24
TIME 10
$ BEGINNING OF RP ALTER 24$74
GENERATE SEQP BULK DATA CARDS FOR EFFICIENCY IN SYMMETRIC DECOMP.
THE FOLLOWING ARE USER INPUT PARAMETERS
VALUE      OPTION
$ SEQOUT--OUTPUT OPTIONS TOR SEQP CARDS
0  DEFAULT-NO PRINTED OR PUNCH OUTPUT
1  PRINT TABLE OF INTERNAL/EXTERNAL SEQUENCE IN INTERNAL ORDER
2  TRANSMIT THE SEQP CARDS TO THE SYSTEM PUNCH FILE
3  PRINT TABLE AND PUNCH SEQP CARDS
$ NEWSEQ--OPTIONS FOR SEQUENCING LOGIC
-1 DO NOT RESEQUENCE
1  USE ACTIVE COLUMN SEQUENCING OPTIOI
2  USE BAND SEQUENCING OPTION
3  DEFAULT-RUN BOTH ACTIVE COLUMN AND BAND SEQUENCING--SAVE THE SEQP ENCE
   WITH THE LOWEST TIME ESTIMATE FOR DECOMPOSITION
$ SUPER--OPTIONS FOR TYPES OF SEQUENCING
0  DEFAULT-USE PASSIVE COLUMN SEQUENCING OPTION
-1 USE SUPERELEMENT SEQUENCING OPTION
FACTOR--USED FOR THE GENERATION OF THE INTERNAL SEQUENCE NUMBER
SEQID = FACTOR * SEID + SEQ NUMBER
   DEFAULT = 10000
$ MPCX--OPTION FOR RPC PROCESSING
DO 101 PROCESS MPC BULK DATA CARDS OR RIGID ELEMENTS
-0  DEFAULT-PROCESS RIGID ELERENTS ONLY
N  POSITIVE INTEGER IS THE NUMBER OF THE MPC SET TO PROCESS
   ALONG WITH ANI RIGID ELEMENTS PRESENT
$ START--STARTING POINT OPTIONS
0  DEFAULT-PROCRAB SELECTS STARTING POINT
1  INTEGER IS NUMBER OF POINTS TO BE USED TO START SEQUENCING
ALTER 8
COND NOSEQP,NEWSEQ $
SEQP  GEOM1,GEOM2,GEOM4,/GEOM1Q,HATPARM/C,Y,SEQOUT=0/V,1,NEWSEQ=+3//
      C Y,SUPER= 0/C,Y,FACTOR=10000/C,Y,MPCX=0/C,Y,START=0 ;
EQUIV GEOM1Q,GEOM1/ALWAYS ;
LABEL NOSEQP
$ END OF RP ALTER 24$74
CEND

```

```

CARD          C A S E   C O N T R O L   D E C K   E C H O
COUNT
1  TITLE=ANALYSIS OF A FULLY BOLTED MOMENT CONNECTION
2  SUBTITLE=COMPUTER + STRUCTURES VOL 21 NO 3 P 505,1985
3  DISPLACEMENT= ALL
4  STRESS=ALL
5  ELFORCE=ALL
6  LOAD=100
7  SPCFORCE=ALL
8  BEGIN BULK

```

INPUT BULK DATA CARD COUNT = U63

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1	CQUAD4	1	99	1	3	6	5			
2	CQUAD4	2	99	2	7	7	6			
3	CQUAD4	3	89	3	4	8	7			
4	CQUAD4	4	99	4	6	10	9			
5	CQUAD4	5	99	5	7	11	10			
6	CQUAD4	6	89	6	8	12	11			
7	CQUAD4	7	99	7	10	14	13			
8	CQUAD4	8	99	8	11	15	14			
9	CQUAD4	9	89	9	12	16	15			
10	CQUAD4	10	89	10	13	29	28			
11	CQUAD4	11	89	11	14	30	29			
12	CQUAD4	12	89	12	15	31	30			
13	CQUAD4	13	79	13	16	32	31			
14	CQUAD4	14	79	14	17	33	32			
15	CQUAD4	15	79	15	18	34	33			
16	CQUAD4	16	79	16	19	35	34			
17	CQUAD4	17	79	17	20	36	35			
18	CQUAD4	18	79	18	21	37	36			
19	CQUAD4	19	79	19	22	38	37			
20	CQUAD4	20	79	20	23	39	38			
21	CQUAD4	21	79	21	24	40	39			
22	CQUAD4	22	79	22	25	41	40			
23	CQUAD4	23	79	23	26	42	41			
24	CQUAD4	24	79	24	230	57	56			
25	CQUAD4	25	79	25	231	59	57			
26	CQUAD4	26	79	26	232	61	59			
27	CQUAD4	27	79	27	233	63	61			
28	CQUAD4	28	79	28	234	65	63			
29	CQUAD4	29	79	29	235	66	65			
30	CQUAD4	30	79	30	42	67	66			
31	CQUAD4	31	79	31	43	68	67			
32	CQUAD4	32	79	32	44	69	68			
33	CQUAD4	33	79	33	45	70	69			
34	CQUAD4	34	79	34	46	71	70			
35	CQUAD4	35	79	35	47	72	71			
36	CQUAD4	36	79	36	48	73	72			
37	CQUAD4	37	59	37	56	75	74			
38	CQUAD4	38	59	38	57	76	75			
39	CQUAD4	39	59	39	58	77	76			
40	CQUAD4	40	59	40	60	78	77			
41	CQUAD4	41	59	41	62	79	78			
42	CQUAD4	42	59	42	64	80	79			
43	CQUAD4	43	59	43	66	81	80			
44	CQUAD4	44	59	44	67	82	81			
45	CQUAD4	45	99	45	28	51	50			
46	CQUAD4	46	99	46	29	52	51			
47	CQUAD4	47	99	47	30	53	52			
48	CQUAD4	48	99	48	31	54	53			
49	CQUAD4	49	99	49	32	55	54			
50	CQUAD4	50	99	50	33	56	55			
51	CQUAD4	51	69	51	34	57	56			
52	CQUAD4	52	69	52	35	58	57			
53	CQUAD4	53	69	53	36	59	58			
54	CQUAD4	54	69	54	37	60	59			
55	CQUAD4	55	69	55	38	61	60			
56	CQUAD4	56	69	56	39	62	61			
57	CQUAD4	57	69	57	40	63	62			
58	CQUAD4	58	69	58	41	64	63			
59	CQUAD4	59	69	59	42	65	64			
60	CQUAD4	60	69	60	43	66	65			
61	CQUAD4	61	69	61	44	67	66			
62	CQUAD4	62	69	62	45	68	67			
63	CQUAD4	63	69	63	46	69	68			
64	CQUAD4	64	69	64	47	70	69			
65	CQUAD4	65	69	65	48	71	70			
66	CQUAD4	66	69	66	49	72	71			
67	CQUAD4	67	69	67	50	73	72			
68	CQUAD4	68	69	68	51	74	73			
69	CQUAD4	69	69	69	52	75	74			
70	CQUAD4	70	69	70	53	76	75			
71	CQUAD4	71	69	71	54	77	76			
72	CQUAD4	72	69	72	55	78	77			
73	CQUAD4	73	69	73	56	79	78			
74	CQUAD4	74	69	74	57	80	79			
75	CQUAD4	75	69	75	58	81	80			
76	CQUAD4	76	69	76	59	82	81			
77	CQUAD4	77	69	77	60	83	82			
78	CQUAD4	78	69	78	61	84	83			
79	CQUAD4	79	69	79	62	85	84			
80	CQUAD4	80	69	80	63	86	85			
81	CQUAD4	81	69	81	64	87	86			
82	CQUAD4	82	69	82	65	88	87			
83	CQUAD4	83	69	83	66	89	88			
84	CQUAD4	84	69	84	67	90	89			
85	CQUAD4	85	69	85	68	91	90			
86	CQUAD4	86	69	86	69	92	91			
87	CQUAD4	87	69	87	70	93	92			
88	CQUAD4	88	69	88	71	94	93			
89	CQUAD4	89	69	89	72	95	94			
90	CQUAD4	90	69	90	73	96	95			
91	CQUAD4	91	69	91	74	97	96			
92	CQUAD4	92	69	92	75	98	97			
93	CQUAD4	93	69	93	76	99	98			
94	CQUAD4	94	69	94	77	100	99			
95	CQUAD4	95	69	95	78	101	100			
96	CQUAD4	96	69	96	79	102	101			
97	CQUAD4	97	69	97	80	103	102			
98	CQUAD4	98	69	98	81	104	103			
99	CQUAD4	99	69	99	82	105	104			
100	CQUAD4	100	69	100	83	106	105			
	CQUAD4		69		84	107	106			
	CQUAD4		69		85	108	107			
	CQUAD4		69		86	109	108			
	CQUAD4		69		87	110	109			
	CQUAD4		69		88	111	110			
	CQUAD4		69		89	112	111			
	CQUAD4		69		90	113	112			
	CQUAD4		69		91	114	113			
	CQUAD4		69		92	115	114			
	CQUAD4		69		93	116	115			
	CQUAD4		69		94	117	116			
	CQUAD4		69		95	118	117			
	CQUAD4		69		96	119	118			
	CQUAD4		69		97	120	119			
	CQUAD4		69		98	121	120			
	CQUAD4		69		99	122	121			
	CQUAD4		69		100	123	122			
	CQUAD4		69		101	124	123			
	CQUAD4		69		102	125	124			
	CQUAD4		69		103	126	125			
	CQUAD4		69		104	127	126			
	CQUAD4		69		105	128	127			
	CQUAD4		69		106	129	128			
	CQUAD4		69		107	130	129			
	CQUAD4		69		108	131	130			
	CQUAD4		69		109	132	131			
	CQUAD4		69		110	133	132			
	CQUAD4		69		111	134	133			
	CQUAD4		69		112	135	134			
	CQUAD4		69		113	136	135			
	CQUAD4		69		114	137	136			
	CQUAD4		69		115	138	137			
	CQUAD4		69		116					
	CQUAD4		69		117					
	CQUAD4		69		118					

SORTED BULK DATA ECRO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
101-	CC	102	999	119	120	139	138	38		
102-	UAD4	103	999	121	121	141	140	140		
103-	UAD4	104	999	122	122	142	141	141		
104-	UAD4	105	999	123	123	143	142	142		
105-	UAD4	106	999	124	124	144	143	143		
106-	UAD4	107	999	125	125	145	144	144		
107-	UAD4	108	999	126	126	147	146	146		
108-	UAD4	109	999	127	127	148	147	147		
109-	UAD4	110	999	128	128	149	148	148		
110-	UAD4	111	999	129	129	150	149	149		
111-	UAD4	112	999	130	130	151	150	150		
112-	UAD4	113	999	131	131	152	151	151		
113-	UAD4	114	999	132	132	153	152	152		
114-	UAD4	115	999	133	133	154	153	153		
115-	UAD4	116	999	134	134	168	154	154		
116-	UAD4	117	999	135	135	169	155	155		
117-	UAD4	118	999	136	136	170	156	156		
118-	UAD4	119	999	137	137	171	157	157		
119-	UAD4	120	999	138	138	172	158	158		
120-	UAD4	121	999	140	140	174	159	159		
121-	UAD4	122	999	141	141	175	160	160		
122-	UAD4	123	999	142	142	176	161	161		
123-	UAD4	124	999	144	144	177	162	162		
124-	UAD4	125	999	146	146	178	163	163		
125-	UAD4	126	999	147	147	179	164	164		
126-	UAD4	127	999	148	148	180	165	165		
127-	UAD4	128	999	149	149	181	166	166		
128-	UAD4	129	999	150	150	182	167	167		
129-	UAD4	130	999	151	151	183	168	168		
130-	UAD4	131	999	152	152	184	169	169		
131-	UAD4	132	999	153	153	185	170	170		
132-	UAD4	133	999	154	154	186	171	171		
133-	UAD4	134	999	155	155	187	172	172		
134-	UAD4	135	999	156	156	188	173	173		
135-	UAD4	136	999	157	157	189	174	174		
136-	UAD4	137	999	158	158	190	175	175		
137-	UAD4	138	999	159	159	191	176	176		
138-	UAD4	139	999	160	160	192	177	177		
139-	UAD4	140	999	161	161	193	178	178		
140-	UAD4	141	999	162	162	194	179	179		
141-	UAD4	142	999	163	163	195	180	180		
142-	UAD4	143	999	164	164	196	181	181		
143-	UAD4	144	999	165	165	197	182	182		
144-	UAD4	145	999	166	166	198	183	183		
145-	UAD4	146	999	167	167	199	184	184		
146-	UAD4	147	999	168	168	200	185	185		
147-	UAD4	148	999	169	169	201	186	186		
148-	UAD4	149	999	170	170	202	187	187		
149-	UAD4	150	999	171	171	203	188	188		
150-	UAD4	151	999	172	172	204	189	189		
151-	UAD4	152	999	173	173	205	190	190		
152-	UAD4	153	999	174	174	206	191	191		
153-	UAD4	154	999	175	175	207	192	192		
154-	UAD4	155	999	176	176	208	193	193		
155-	UAD4	156	999	177	177	209	194	194		
156-	UAD4	157	999	178	178	210	195	195		
157-	UAD4	158	999	179	179	211	196	196		
158-	UAD4	159	999	180	180	212	197	197		
159-	UAD4	160	999	181	181	213	198	198		
160-	UAD4	161	999	182	182	214	199	199		
161-	UAD4	162	999	183	183	215	200	200		
162-	UAD4	163	999	184	184	216	201	201		
163-	UAD4	164	999	185	185	217	202	202		
164-	UAD4	165	999	186	186	218	203	203		
165-	UAD4	166	999	187	187	219	204	204		
166-	UAD4	167	999	188	188	220	205	205		
167-	UAD4	168	999	189	189	221	206	206		
168-	UAD4	169	999	190	190	222	207	207		
169-	UAD4	170	999	191	191	223	208	208		
170-	UAD4	171	999	192	192	224	209	209		
171-	UAD4	172	999	193	193	225	210	210		
172-	UAD4	173	999	194	194	226	211	211		
173-	UAD4	174	999	195	195	227	212	212		
174-	UAD4	175	999	196	196	228	213	213		
175-	UAD4	176	999	197	197	229	214	214		
176-	UAD4	177	999	198	198		215	215		
177-	UAD4	178	999	199	199		216	216		
178-	UAD4	179	999	200	200		217	217		
179-	UAD4	180	999	201	201		218	218		
180-	UAD4	181	999	202	202		219	219		
181-	UAD4	182	999	203	203		220	220		
182-	UAD4	183	999	204	204		221	221		
183-	UAD4	184	999	205	205		222	222		
184-	UAD4	185	999	206	206		223	223		
185-	UAD4	186	999	207	207		224	224		
186-	UAD4	187	999	208	208		225	225		
187-	UAD4	188	999	209	209		226	226		
188-	UAD4	189	999	210	210		227	227		
189-	UAD4	190	999	211	211		228	228		
190-	UAD4	191	999	212	212					
191-	UAD4	192	999	213	213					
192-	UAD4	193	999	214	214					
193-	UAD4	194	999	215	215					
194-	UAD4	195	999	216	216					
195-	UAD4	196	999	217	217					
196-	UAD4	197	999	218	218					
197-	UAD4	198	999	219	219					
198-	UAD4	199	999	220	220					
199-	UAD4	200	999	221	221					
200-	UAD4	201	999	222	222					
	UAD4	202	999	223	223					
	UAD4	203	999	224	224					
	UAD4	204	999	225	225					
	UAD4	205	999	226	226					
	UAD4	206	999	227	227					
	UAD4	207	999	228	228					
	UAD4	208	999	229	229					
	UAD4	209	999	230	230					
	UAD4	210	999	231	231					
	UAD4	211	999	232	232					
	UAD4	212	999	233	233					
	UAD4	213	999	234	234					
	UAD4	214	999	235	235					
	UAD4	215	999	236	236					
	UAD4	216	999	237	237					
	UAD4	217	999	238	238					
	UAD4	218	999	239	239					
	UAD4	219	999	240	240					
	UAD4	220	999	241	241					
	UAD4	221	999	242	242					
	UAD4	222	999	243	243					
	UAD4	223	999	244	244					
	UAD4	224	999	245	245					
	UAD4	225	999	246	246					
	UAD4	226	999	247	247					
	UAD4	227	999	248	248					
	UAD4	228	999	249	249					
	UAD4	229	999	250	250					
	UAD4	230	999	251	251					
	UAD4	231	999	252	252					
	UAD4	232	999	253	253					
	UAD4	233	999	254	254					
	UAD4	234	999	255	255					
	UAD4	235	999	256	256					
	UAD4	236	999	257	257					
	UAD4	237	999	258	258					
	UAD4	238	999	259	259					
	UAD4	239	999	260	260					
	UAD4	240	999	261	261					
	UAD4	241	999	262	262					
	UAD4	242	999	263	263					
	UAD4	243	999	264	264					
	UAD4	244	999	265	265					
	UAD4	245	999	266	266					
	UAD4	246	999	267	267					
	UAD4	247	999	268	268					
	UAD4	248	999	269	269					
	UAD4	249	999	270	270					
	UAD4	250	999	271	271					
	UAD4	251	999	272	272					
	UAD4	252	999	273	273					
	UAD4	253	999	274	274					
	UAD4	254	999	275	275					
	UAD4	255	999	276	276					
	UAD4	256	999	277	277					
	UAD4	257	999	278	278					

CARD COUNT	1	2	3	4	5	6	7	8	9	10
201-	FORCE	100	228		1.0	0.	-28.34	0.		
202-	FORCE	100	229		1.0	0.	-6.585	0.		
203-	GRDSET							345		
204-	GBID	1		0.0	0.0	0.0		1345		
205-	GRID	2		2.22	0.0	0.0				
206-	GRID	3		4.45	0.0	0.0				
207-	GRID	4		5.125	0.0	0.0				
208-	GRID	5		0.0	4.933	0.0		1345		
209-	GRID	6		2.22	4.933	0.0				
210-	GBID	7		4.45	4.933	0.0				
211-	GRID	8		5.125	4.933	0.0				
212-	GBID	9		0.0	9.866	0.0		1345		
213-	GRID	10		2.22	9.866	0.0				
214-	GRID	11		4.45	9.866	0.0				
215-	GRID	12		5.125	9.866	0.0				
216-	GRID	13		0.0	14.8	0.0		1345		
217-	GRID	14		2.22	14.8	0.0				
218-	GRID	15		4.45	14.8	0.0				
219-	GRID	16		5.125	14.8	0.0				
220-	GRID	17		6.875	14.8	0.0				
221-	GRID	18		8.625	14.8	0.0				
222-	GRID	19		9.682	14.8	0.0				
223-	GRID	20		10.568	14.8	0.0				
224-	GRID	21		12.682	14.8	0.0				
225-	GRID	22		13.568	14.8	0.0				
226-	GRID	23		15.682	14.8	0.0				
227-	GRID	24		16.568	14.8	0.0				
228-	GRID	25		18.682	14.8	0.0				
229-	GRID	26		19.568	14.8	0.0				
230-	GRID	27		20.875	14.8	0.0				
231-	GRID	28		0.0	15.5	0.0		1345		
232-	GRID	29		2.22	15.5	0.0				
233-	GRID	30		4.45	15.5	0.0				
234-	GRID	31		5.125	15.5	0.0				
235-	GRID	32		6.875	15.5	0.0				
236-	GRID	33		8.625	15.5	0.0				
237-	GRID	34		9.682	15.5	0.0				
238-	GRID	35		10.568	15.5	0.0				
239-	GRID	36		12.682	15.5	0.0				
240-	GRID	37		13.568	15.5	0.0				
241-	GBID	38		15.682	15.5	0.0				
242-	GRID	39		16.568	15.5	0.0				
243-	GRID	40		18.682	15.5	0.0				
244-	GRID	41		19.568	15.5	0.0				
245-	GRID	42		20.875	15.5	0.0				
246-	GRID	43		0.0	17.0	0.0				
247-	GRID	44		2.22	17.0	0.0				
248-	GRID	45		4.45	17.0	0.0				
249-	GRID	46		5.125	17.0	0.0				
250-	GRID	47		6.875	17.0	0.0		2345		
251-	GRID	48		8.625	17.0	0.0		2345		
252-	GRID	49		9.682	17.0	0.0				
253-	GRID	50		0.0	17.74	0.0		1345		
254-	GRID	51		2.22	17.74	0.0				
255-	GRID	52		4.45	17.74	0.0				
256-	GRID	53		5.125	17.74	0.0				
257-	GRID	54		8.625	17.74	0.0				
258-	GRID	55		10.375	17.74	0.0				
259-	GRID	56		6.875	16.285	0.0				
260-	GRID	57		8.625	16.285	0.0				
261-	GRID	58		9.682	16.285	0.0				
262-	GRID	59		10.568	16.285	0.0				
263-	GRID	60		12.682	16.285	0.0				
264-	GRID	61		13.568	16.285	0.0				
265-	GRID	62		15.682	16.285	0.0				
266-	GRID	63		16.568	16.285	0.0				
267-	GRID	64		18.682	16.285	0.0				
268-	GRID	65		19.568	16.285	0.0				
269-	GRID	66		20.875	16.285	0.0				
270-	GRID	67		23.83	16.285	0.0				
271-	GRID	68		27.77	16.285	0.0				
272-	GRID	69		32.7	16.285	0.0				
273-	GRID	70		38.72	16.285	0.0				
274-	GRID	71		45.32	16.285	0.0				
275-	GRID	72		45.71	16.285	0.0				
276-	GRID	73		46.5	16.285	0.0				
277-	GRID	74		6.875	17.74	0.0				
278-	GRID	75		8.625	17.74	0.0				
279-	GRID	76		9.682	17.74	0.0				
280-	GRID	77		12.625	17.74	0.0				
281-	GRID	78		15.625	17.74	0.0				
282-	GRID	79		18.625	17.74	0.0				
283-	GRID	80		20.875	17.74	0.0				
284-	GRID	81		23.83	17.74	0.0				
285-	GRID	82		27.77	17.74	0.0				
286-	GRID	83		0.0	19.885	0.0		1345		
287-	GRID	84		2.22	19.885	0.0				
288-	GRID	85		4.45	19.885	0.0				
289-	GRID	86		5.125	19.885	0.0				
290-	GRID	87		8.625	19.885	0.0				
291-	GRID	88		10.375	19.885	0.0				
292-	GRID	89		6.875	19.885	0.0				
293-	GRID	90		9.625	19.885	0.0				
294-	GRID	91		12.625	19.885	0.0				
295-	GRID	92		15.625	19.885	0.0				
296-	GRID	93		18.625	19.885	0.0				
297-	GRID	94		20.875	19.885	0.0				
298-	GRID	95		23.83	19.885	0.0				
299-	GBID	96		27.77	19.885	0.0				
300-	GRID	97		32.7	19.885	0.0				

CARD	1	2	3	4	5	6	7	8	9	10
CARD										
401-	GRID	198		5.125	30.8					
402-	GRID	199		6.875	30.8					
403-	GRID	200		8.625	30.8					
404-	GRID	201		9.682	30.8					
405-	GRID	202		10.568	30.8					
406-	GRID	203		12.682	30.8					
407-	GRID	204		13.568	30.8					
408-	GRID	205		15.682	30.8					
409-	GRID	206		16.568	30.8					
410-	GRID	207		18.682	30.8					
411-	GRID	208		19.568	30.8					
412-	GRID	209		20.875	30.8					
413-	GRID	210		0.0	33.56					
414-	GRID	211		2.22	33.56				1345	
415-	GRID	212		4.45	33.56					
416-	GRID	213		5.125	33.56					
417-	GRID	214		0.0	39.87				1345	
418-	GRID	215		2.22	39.87					
419-	GRID	216		4.45	39.87					
420-	GRID	217		5.125	39.87					
421-	GRID	218		0.0	46.19				1345	
422-	GRID	219		2.22	46.19					
423-	GRID	220		4.45	46.19					
424-	GRID	221		5.125	46.19					
425-	GRID	222		0.0	55.5				1345	
426-	GRID	223		2.22	55.5					
427-	GRID	224		4.45	55.5					
428-	GRID	225		5.125	55.5					
429-	GRID	226		0.0	55.6				1345	
430-	GRID	227		2.22	59.6					
431-	GRID	228		4.45	59.6					
432-	GRID	229		5.125	59.6					
433-	GRID	230		6.275	59.6					
434-	GRID	231		8.625	59.6					
435-	GRID	232		10.568	59.6					
436-	GRID	233		13.568	59.6					
437-	GRID	234		16.568	59.6					
438-	GRID	235		19.568	59.6					
439-	GRID	236		20.875	59.6					
440-	GRID	237		6.875	29.67					
441-	GRID	238		8.625	29.67					
442-	GRID	239		10.568	29.67					
443-	GRID	240		13.568	29.67					
444-	GRID	241		16.568	29.67					
445-	GRID	242		19.568	29.67					
446-	GRID	243		20.875	29.67					
447-	HATI	5	7640.		0.3					
448-	HATI	15	2009.		0.3					
449-	HATI	25	2.957E+4		0.3					
450-	PARAM	AUTOSPC	YES							
451-	PROD	39	5	0.7854	-19635	0.5	0.0			
452-	PROD	49	15	0.7854	-19635	0.5	0.0			
453-	PSHELL	59	25	0.45						
454-	PSHELL	69	25	.50						
455-	PSHELL	79	25	10.07						
456-	PSHELL	89	25	10.08						
457-	PSHELL	99	25	0.42						
	ENDDATA									

TOTAL COUNT= 458

Input Data for Beam-to-Column Connection
Using Solid Element Model

N A S T R A N E X E C U T I V E C O N T R O L D E C K E C H O

ID COMM = WIN12
SOL 2U
TIME 5
CEYD

C A S E C O N T R O L D E C K E C H O

CARD COUNT	
1	TITLE=ANALYSIS OF A FULLY BOLTED MOMENT CONNECTION.
2	SUBTITLE=ELASTIC ANALYSIS , THREE-DIHENSIONAL CONFIGURATION.
3	ELFORCE=ALL
4	SPCFORCE=ALL
5	STRESS=ALL
6	DISPLACEMENT=ALL
7	LOAD=100
8	BEGIN BULK

INPUT BULK DATA CARD COUNT = 2111

CARD COUNT		1..	2..	3..	4..	5..	6..	7..	8..	9..	10..
101-	+A11	175	164								
102-	CHEXA	42	9	76	87	88	77	164	175		+A42
103-	+A12	176	165								
104-	CHEXA	43	9	77	88	89	78	165	176		+A43
105-	+A13	177	166								
106-	CHEXA	44	9	78	89	90	79	166	177		+A44
107-	+A14	178	167								
108-	CHEXA	45	9	79	90	91	80	167	178		+A45
109-	+A15	179	168								
110-	CHEXA	46	9	80	91	92	81	168	179		+A46
111-	+A16	180	169								
112-	CHEXA	47	9	81	92	93	82	169	180		+A47
113-	+A17	181	170								
114-	CHEXA	48	9	85	96	97	86	173	184		+A48
115-	+A18	185	174								
116-	CHEXA	49	9	86	97	98	87	174	185		+A49
117-	+A19	186	175								
118-	CHEXA	50	9	87	98	99	88	175	186		+A50
119-	+A20	187	176								
120-	CHEXA	51	9	88	99	100	89	176	187		+A51
121-	+A21	188	177								
122-	CHEXA	52	9	89	100	101	90	177	188		+A52
123-	+A22	189	178								
124-	CHEXA	53	9	90	101	102	91	178	189		+A53
125-	+A23	190	179								
126-	CHEXA	54	9	91	102	103	92	179	190		+A54
127-	+A24	191	180								
128-	CHEXA	55	9	92	103	104	93	180	191		+A55
129-	+A25	192	181								
130-	CHEXA	56	9	94	105	106	95	182	193		+A56
131-	+A26	194	183								
132-	CHEXA	57	9	95	106	107	96	183	194		+A57
133-	+A27	195	184								
134-	CHEXA	58	9	96	107	108	97	184	195		+A58
135-	+A28	196	185								
136-	CHEXA	59	9	97	108	109	98	185	196		+A59
137-	+A29	197	186								
138-	CHEXA	60	9	98	109	110	99	186	197		+A60
139-	+A30	198	187								
140-	CHEXA	61	9	99	110	111	100	187	198		+A61
141-	+A31	199	188								
142-	CHEXA	62	9	100	111	112	101	188	199		+A62
143-	+A32	200	189								
144-	CHEXA	63	9	101	112	113	102	189	200		+A63
145-	+A33	201	190								
146-	CHEXA	64	9	102	113	114	103	190	201		+A64
147-	+A34	202	191								
148-	CHEXA	65	9	103	114	115	104	191	202		+A65
	+A35	203	192								
	CHEXA	66	9	107	118	119	108	195	206		+A66
	+A36	207	196								
152-	CHEXA	67	9	108	119	120	109	196	207		+A67
153-	+A37	208	197								
154-	CHEXA	68	9	109	120	121	110	197	208		+A68
155-	+A38	209	198								
156-	CHEXA	69	9	110	121	122	111	198	209		+A69
157-	+A39	210	199								
158-	CHEXA	70	9	111	122	123	112	199	210		+A70
159-	+A40	211	200								
160-	CHEXA	71	9	112	123	124	113	200	211		+A71
161-	+A41	212	201								
162-	CHEXA	72	9	113	124	125	114	201	212		+A72
163-	+A42	213	202								
164-	CHEXA	73	9	114	125	126	115	202	213		+A73
165-	+A43	214	203								
	CHEXA	74	9	116	127	128	117	204	215		+A74
166-	+A44	216	205								
168-	CHEXA	75	9	117	128	129	118	205	216		+A75
169-	+A45	217	206								
170-	CHEXA	76	9	118	129	130	119	206	217		+A76
171-	+A46	218	207								
172-	CHEXA	77	9	119	130	131	120	207	218		+A77
173-	+A47	213	208								
174-	CHEXA	78	9	120	131	132	121	208	219		+A78
175-	+A48	220	209								
176-	CHEXA	79	9	121	132	133	122	209	220		+A79
177-	+A49	221	210								
178-	CHEXA	80	9	122	133	134	123	210	221		+A80
179-	+A50	222	211								
180-	CHEXA	81	9	123	134	135	124	211	222		+A81
181-	+A51	223	212								
182-	CHEXA	82	9	124	135	136	125	212	223		+A82
183-	+A52	224	213								
184-	CHEXA	83	9	125	136	137	126	213	224		+A83
185-	+A53	225	214								
186-	CHEXA	84	9	127	138	139	128	215	226		+A84
187-	+A54	227	216								
188-	CHEXA	85	9	128	139	140	129	216	227		+A85
189-	+A55	228	217								
190-	CHEXA	86	9	129	140	141	130	217	228		+A86
191-	+A56	229	218								
192-	CHEXA	87	9	130	141	142	131	219	229		+A87
193-	+A57	230	219								
194-	CHEXA	88	9	131	142	143	132	219	230		+A88
195-	+A58	231	220								
196-	CHEXA	89	9	132	143	144	133	220	231		+A89
197-	+A59	232	221								
198-	CHEXA	90	9	133	144	145	134	221	232		+1190
199-	+A60	233	222								
200-	CHEXA	91	9	134	145	146	135	222	233		+A91

CARD COUNT	1	2	3	4	5	6	7	8	9	10
201-	+A91	234	223							
202-	CHEXA	92	9	135	146	147	136	223	234	+A92
203-	+A92	235	224							
204-	CHEXA	93	9	136	147	148	137	224	235	+A93
205-	+A93	236	225							
206-	CHEXA	94	9	151	162	163	152	237	239	+A94
207-	+A94	240	238							
208-	CHEXA	95	9	162	173	174	163	239	241	+A95
209-	+A95	242	240							
210-	CHEXA	96	9	173	184	185	174	241	245	+A96
211-	+A96	246	242							
212-	CHEXA	97	9	182	193	194	183	243	247	+A97
213-	+A97	248	244							
214-	CHEXA	98	9	183	194	195	184	244	248	+A98
215-	+A98	249	245							
216-	CHEXA	99	9	184	195	196	185	245	249	+A99
217-	+A99	250	246							
218-	CHEXA	100	9	195	206	207	196	249	253	+A100
219-	+A100	254	250							
220-	CHEXA	101	9	206	217	218	207	253	257	+B1
221-	+B1	258	254							
222-	CHEXA	102	9	217	228	229	218	257	259	+B2
223-	+B2	260	258							
224-	CHEXA	103	9	237	239	240	238	261	263	+B3
225-	+B3	264	262							
226-	CHEXA	104	9	239	241	242	240	263	265	+B4
227-	+B4	266	264							
228-	CHEXA	105	9	241	245	246	242	265	269	+B5
229-	+B5	270	266							
230-	CHEXA	106	9	243	247	248	244	267	271	+B6
231-	+B6	272	268							
232-	CHEXA	107	9	244	248	249	245	268	272	+B7
233-	+B7	273	269							
234-	CHEXA	108	9	245	249	250	246	269	273	+B8
235-	+B8	274	270							
236-	CHEXA	109	9	249	253	254	250	273	277	+B9
237-	+B9	278	274							
238-	CHEXA	110	9	250	254	255	251	274	278	+B10
239-	+B10	279	275							
240-	CHEXA	111	9	251	255	256	252	275	279	+B11
241-	+B11	280	276							
242-	CHEXA	112	9	253	257	258	254	277	281	+B12
243-	+B12	282	278							
244-	CHEXA	113	9	257	259	260	258	281	283	+B13
245-	+B13	284	282							
246-	CHEXA	114	9	261	263	264	262	285	287	+B14
247-	+B14	288	286							
248-	CHEXA	115	9	263	265	266	264	287	289	+B15
249-	+B15	290	288							
250-	CHEXA	116	9	265	269	270	266	289	293	+B16
251-	+B16	294	290							
252-	CHEXA	117	9	267	271	272	268	291	295	+B17
253-	+B17	296	292							
254-	CHEXA	118	9	268	272	273	269	292	296	+B18
255-	+B18	297	293							
256-	CHEXA	119	9	269	273	274	270	293	297	+B19
257-	+B19	298	294							
258-	CHEXA	120	9	273	277	278	274	297	301	+B20
259-	+B20	302	298							
260-	CHEXA	121	9	274	278	279	275	298	302	+B21
261-	+B21	303	299							
262-	CHEXA	122	9	275	279	280	276	299	303	+B22
263-	+B22	304	300							
264-	CHEXA	123	9	277	281	282	278	301	305	+B23
265-	+B23	306	302							
266-	CHEXA	124	9	281	283	284	282	305	307	+B24
267-	+B24	308	306							
268-	CHEXA	125	9	285	287	288	286	309	311	+B25
269-	+B25	312	310							
270-	CHEXA	126	9	287	289	290	288	311	313	+B26
271-	+B26	314	312							
272-	CHEXA	127	9	289	293	294	290	313	317	+B27
273-	+B27	318	314							
274-	CHEXA	128	9	291	295	296	292	315	319	+B28
275-	+B28	320	316							
276-	CHEXA	129	9	292	296	297	293	316	320	+B29
277-	+B29	321	317							
278-	CHEXA	130	9	293	297	298	294	317	321	+B30
279-	+B30	322	318							
280-	CHEXA	131	9	297	301	302	298	321	325	+B31
281-	+B31	326	322							
282-	CHEXA	132	9	298	302	303	299	322	326	+B32
283-	+B32	327	323							
284-	CHEXA	133	9	299	303	304	300	323	327	+B33
285-	+B33	328	324							
286-	CHEXA	134	9	301	305	306	302	325	329	+B34
287-	+B34	330	326							
288-	CHEXA	135	9	305	307	308	306	329	331	+B35
289-	+B35	332	330							
290-	CHEXA	136	9	309	311	312	310	333	335	+B36
291-	+B36	336	334							
292-	CHEXA	137	9	311	313	314	312	335	337	+B37
293-	+B37	338	336							
294-	CHEXA	138	9	313	317	318	314	337	341	+B38
295-	+B38	342	338							
296-	CHEXA	139	9	315	319	320	316	339	343	+B39
297-	+B39	344	340							
298-	CHEXA	140	9	316	320	321	317	340	344	+B40
299-	+B40	345	341							
300-	CHEXA	141	9	317	321	322	318	341	345	+B41

CARD COUNT	1	2	3..	4..	5..	6..	7	8	9	10
301-	+B41	346	342							
302-	CHEXA	142	9	321	325	326	322	345	349	+B42
303-	+B42	350	9							
304-	CHEXA	143	9	322	326	327	323	346	350	+B43
305-	+B43	351	9							
306-	CHEXA	144	9	323	327	328	324	347	351	+B44
307-	+B44	352	9							
308-	CHEXA	145	9	325	329	330	326	349	353	+B45
309-	+B45	354	9							
310-	CHEXA	146	9	329	331	332	330	353	355	+B46
311-	+B46	356	9							
312-	CHEXA	147	9	333	335	336	334	359	370	+B47
313-	+B47	371	9							
314-	CHEXA	148	9	335	337	338	336	370	381	+B48
315-	+B48	382	9							
316-	CHEXA	149	9	337	341	342	338	381	392	+B49
317-	+B49	393	9							
318-	CHEXA	150	9	339	343	344	340	390	401	+B50
319-	+B50	402	9							
320-	CHEXA	151	9	340	344	345	341	391	402	+B51
321-	+B51	403	9							
322-	CHEXA	152	9	341	345	346	342	392	403	+B52
323-	+B52	404	9							
324-	CHEXA	153	9	345	349	350	346	403	414	+B53
325-	+B53	415	9							
326-	CHEXA	154	9	349	353	354	350	414	425	+B54
327-	+B54	426	9							
328-	CHEXA	155	9	353	355	356	354	425	436	+B55
329-	+B55	437	9							
330-	CHEXA	156	9	357	368	369	358	445	456	+B56
331-	+B56	457	9							
332-	CHEXA	157	9	358	369	370	359	446	457	+B57
333-	+B57	458	9							
334-	CHEXA	158	9	359	370	371	360	447	458	+B58
335-	+B58	459	9							
336-	CHEXA	159	9	360	371	372	361	448	459	+B59
337-	+B59	460	9							
338-	CHEXA	160	9	361	372	373	362	449	460	+B60
339-	+B60	461	9							
340-	CHEXA	161	9	362	373	374	363	450	461	+B61
341-	+B61	462	9							
342-	CHEXA	162	9	363	374	375	364	451	462	+B62
343-	+B62	463	9							
344-	CHEXA	163	9	364	375	376	365	452	463	+B63
345-	+B63	464	9							
346-	CHEXA	164	9	365	376	377	366	453	464	+B64
347-	+B64	465	9							
348-	CHEXA	165	9	366	377	378	367	454	465	+B65
349-	+B65	466	9							
350-	CHEXA	166	9	368	379	380	369	456	467	+B66
351-	+B66	468	9							
352-	CHEXA	167	9	369	380	381	370	457	468	+B67
353-	+B67	469	9							
354-	CHEXA	168	9	370	381	382	371	458	469	+B68
355-	+B68	470	9							
356-	CHEXA	169	9	371	382	383	372	459	470	+B69
357-	+B69	471	9							
358-	CHEXA	170	9	372	383	384	373	460	471	+B70
359-	+B70	472	9							
360-	CHEXA	171	9	373	384	385	374	461	472	+B71
361-	+B71	473	9							
362-	CHEXA	172	9	374	385	386	375	462	473	+B72
363-	+B72	474	9							
364-	CHEXA	173	9	375	386	387	376	463	474	+B73
365-	+B73	475	9							
366-	CHEXA	174	9	376	387	388	377	464	475	+B74
367-	+B74	476	9							
368-	CHEXA	175	9	377	388	389	378	465	476	+B75
369-	+B75	477	9							
370-	CHEXA	176	9	381	392	393	382	469	480	+B76
371-	+B76	481	9							
372-	CHEXA	177	9	382	393	394	383	470	481	+B77
373-	+B77	482	9							
374-	CHEXA	178	9	383	394	395	384	471	482	+B78
375-	+B78	483	9							
376-	CHEXA	179	9	384	395	396	385	472	483	+B79
377-	+B79	484	9							
378-	CHEXA	180	9	385	396	397	386	473	484	+B80
379-	+B80	485	9							
380-	CHEXA	181	9	386	397	398	387	474	485	+B81
381-	+B81	486	9							
382-	CHEXA	182	9	387	398	399	388	475	486	+B82
383-	+B82	487	9							
384-	CHEXA	183	9	388	399	400	389	476	487	+B83
385-	+B83	488	9							
386-	CHEXA	184	9	390	401	402	391	478	489	+B84
387-	+B84	490	9							
388-	CHEXA	185	9	391	402	403	392	479	490	+B85
389-	+B85	491	9							
390-	CHEXA	186	9	392	403	404	393	480	491	+B86
391-	+B86	492	9							
392-	CHEXA	187	9	393	404	405	394	481	492	+B87
393-	+B87	493	9							
394-	CHEXA	188	9	394	405	406	395	482	493	+B88
395-	+B88	494	9							
396-	CHEXA	189	9	395	406	407	396	483	494	+B89
397-	+B89	495	9							
398-	CHEXA	190	9	396	407	408	397	484	495	+B90
399-	+B90	496	9							
400-	CHEXA	191	9	397	408	409	398	485	496	+B91

CARD COUNT	1	2	3	4	5	6	7	8	9	10
501-	+C41	578	576							
502-	CHEXA	242	9	557	561	562	558	577	581	+C42
503-	+C42	582	578							
504-	CHEXA	243	9	559	563	564	560	579	583	+C43
505-	+C43	584	580							
506-	CHEXA	244	9	560	564	565	561	580	584	+C44
507-	+C44	585	581							
508-	CHEXA	245	9	561	565	566	562	581	585	+C45
509-	+C45	586	582							
510-	CHEXA	246	9	565	567	568	566	585	587	+C46
511-	+C46	588	586							
512-	CHEXA	247	9	567	569	570	568	587	589	+C47
513-	+C47	590	588							
514-	CHEXA	248	9	569	571	572	570	589	591	+C48
515-	+C48	592	590							
516-	CHEXA	249	9	573	575	576	574	593	595	+C49
517-	+C49	594	594							
518-	CHEXA	250	9	575	577	578	576	595	597	+C50
519-	+C50	598	596							
520-	CHEXA	251	9	577	581	582	578	597	601	+C51
521-	+C51	602	598							
522-	CHEXA	252	9	579	583	584	580	599	603	+C52
523-	+C52	604	600							
524-	CHEXA	253	9	580	584	585	581	600	604	+C53
525-	+C53	605	601							
526-	CHEXA	254	9	581	585	586	582	601	605	+C54
527-	+C54	606	602							
528-	CHEXA	255	9	585	587	588	586	605	607	+C55
529-	+C55	608	606							
530-	CHEXA	256	9	587	589	590	588	607	609	+C56
531-	+C56	610	608							
532-	CHEXA	257	9	589	591	592	590	609	611	+C57
533-	+C57	612	610							
534-	CHEXA	258	9	593	595	596	594	613	615	+C58
535-	+C58	616	614							
536-	CHEXA	259	9	595	597	598	596	615	617	+C59
537-	+C59	618	616							
538-	CHEXA	260	9	597	601	602	598	617	621	+C60
539-	+C60	622	618							
540-	CHEXA	261	9	599	603	604	600	619	623	+C61
541-	+C61	624	620							
542-	CHEXA	262	9	600	604	605	601	620	624	+C62
543-	+C62	625	621							
544-	CHEXA	263	9	601	605	606	602	621	625	+C63
545-	+C63	626	622							
546-	CHEXA	264	9	605	607	608	606	625	627	+C64
547-	+C64	628	626							
548-	CHEXA	265	9	607	609	610	608	627	629	+C65
549-	+C65	630	628							
550-	CHEXA	266	9	609	611	612	610	629	631	+C66
551-	+C66	632	630							
552-	CHEXA	267	9	633	639	640	634	667	673	+C67
553-	+C67	674	668							
554-	CHEXA	268	9	634	640	641	635	668	674	+C68
555-	+C68	675	669							
556-	CHEXA	269	9	635	641	642	636	669	675	+C69
557-	+C69	676	670							
558-	CHEXA	270	9	636	642	643	637	670	676	+C70
559-	+C70	677	671							
560-	CHEXA	271	9	637	643	644	638	671	677	+C71
561-	+C71	678	672							
562-	CHEXA	272	3	641	645	646	642	675	679	+C72
563-	+C72	680	676							
564-	CHEXA	273	9	645	647	648	646	679	681	+C73
565-	+C73	682	680							
566-	CHEXA	274	9	647	649	650	648	681	683	+C74
567-	+C74	684	682							
568-	CHEXA	275	9	649	651	652	650	683	685	+C75
569-	+C75	686	684							
570-	CHEXA	276	9	651	653	654	652	695	687	+C76
571-	+C76	688	686							
572-	CHEXA	277	9	653	657	658	654	687	691	+C77
573-	+C77	692	688							
574-	CHEXA	278	0	655	661	662	656	699	695	+C78
575-	+C78	696	090							
576-	CHEXA	279	9	656	662	663	657	690	696	+C79
577-	+C79	697	691							
578-	CHEXA	280	9	657	663	664	658	691	697	+C80
579-	+C80	698	692							
580-	CHEXA	281	9	658	664	665	659	692	698	+C81
581-	+C81	699	693							
582-	CHEXA	282	9	659	665	666	660	693	699	+C82
583-	+C82	700	694							
584-	CHEXA	283	9	667	673	674	668	701	707	+C83
585-	+C83	704	702							
586-	CHEXA	284	9	668	674	675	669	702	708	+C84
587-	+C84	709	703							
588-	CHEXA	285	9	669	675	676	670	703	709	+C85
589-	+C85	710	704							
590-	CHEXA	286	9	670	676	677	671	700	710	+C86
591-	+C86	711	705							
592-	CHEXA	287	9	671	677	678	672	705	711	+C87
593-	+C87	712	706							
594-	CHEXA	288	9	675	679	680	676	709	713	+C88
595-	+C88	714	710							
596-	CHEXA	289	9	679	681	682	680	713	715	+C89
597-	+C89	716	714							
598-	CHEXA	290	9	681	683	684	682	715	717	+C90
599-	+C90	718	716							
600-	CHEXA	291	9	683	685	686	684	717	719	+C91

CARD COUNT	1	2	3	4	5	6	7	8	9	10
601-	+C91	720	718							
602-	CHEXA	292	9	685	687	688	686	719	721	+C92
603-	+C92	722	9	720						
604-	CHEXA	293	9	687	691	692	688	721	725	+C93
605-	+C93	726	9	722						
606-	CHEXA	294	9	689	695	696	690	723	729	+C94
607-	+C94	730	9	724						
608-	CHEXA	295	9	690	696	697	691	72U	730	+C95
609-	+C95	731	9	725						
610-	CHEXA	296	9	691	697	698	692	725	731	+C96
611-	+C96	732	9	726						
612-	CHEXA	297	9	692	698	699	693	726	732	+C97
613-	+C97	733	9	727						
614-	CHEXA	298	9	693	699	700	694	727	733	+C98
615-	+C98	734	9	728						
616-	CHEXA	299	9	701	707	708	702	735	741	+C99
617-	+C99	742	9	736						
618-	CHEXA	300	9	702	708	709	703	736	742	+C100
619-	+C100	743	9	737						
620-	CHEXA	301	9	703	709	710	704	737	743	+D1
621-	+D1	744	9	738						
622-	CHEXA	302	9	704	710	711	705	738	744	+D2
623-	+D2	745	9	739						
624-	CHEXA	303	9	705	711	712	706	739	745	+D3
625-	+D3	746	9	740						
626-	CHEXA	304	9	709	713	714	710	743	747	+D4
627-	+DU	748	9	744						
628-	CHEXA	305	9	713	715	716	714	747	749	+D5
629-	+D5	750	9	748						
630-	CHEXA	306	9	715	717	718	716	749	751	+D6
631-	+D6	752	9	750						
632-	CHEXA	307	9	717	719	720	718	751	753	+D7
633-	+D7	754	9	752						
634-	CHEXA	308	9	719	721	722	720	753	755	+D8
635-	+D8	756	9	754						
636-	CHEXA	309	9	721	725	726	722	755	759	+D9
637-	+D9	760	9	756						
638-	CHEXA	310	9	723	729	730	724	757	763	+D10
639-	+D10	764	9	758						
640-	CHEXA	311	9	724	730	731	725	758	764	+D11
641-	+D11	765	9	759						
642-	CHEXA	312	9	725	731	732	726	759	765	+D12
643-	+D12	766	9	760						
644-	CHEXA	313	9	726	732	733	727	760	766	+D13
645-	+D13	767	9	761						
646-	CHEXA	314	9	727	733	734	728	761	767	+D14
647-	+D14	768	9	762						
648-	CHEXA	315	9	735	741	742	736	769	775	+D15
649-	+D15	776	9	770						
650-	CHEXA	316	9	736	742	743	737	770	776	+D16
651-	+D16	777	9	771						
652-	CHEXA	317	9	737	743	744	738	771	777	+D17
653-	+D17	778	9	772						
654-	CHEXA	318	9	738	744	745	739	772	778	+D18
655-	+D18	779	9	773						
656-	CHEXA	319	9	739	745	746	740	773	779	+D19
657-	+D19	780	9	774						
658-	CHEXA	320	9	743	747	748	744	777	781	+D20
659-	+D20	782	9	778						
660-	CHEXA	321	9	747	749	750	748	791	783	+D21
661-	+D21	784	9	782						
662-	CHEXA	322	9	749	751	752	750	783	785	+D22
663-	+D22	786	9	784						
664-	CHEXA	323	9	751	753	754	752	785	787	+D23
665-	+D23	788	9	786						
666-	CHEXA	324	9	753	755	756	754	787	789	+D24
667-	+D24	790	9	788						
668-	CHEXA	325	9	755	759	760	756	789	793	+D25
669-	+D25	794	9	790						
670-	CHEXA	326	9	757	763	764	758	791	797	+D26
671-	+D26	798	9	792						
672-	CHEXA	327	9	758	764	765	759	792	798	+D27
673-	+D27	799	9	793						
674-	CHEXA	328	9	759	765	766	760	793	799	+D28
675-	+D28	800	9	794						
676-	CHEXA	329	9	760	766	767	761	794	800	+D29
677-	+D29	801	9	795						
678-	CHEXA	330	9	761	767	768	762	795	801	+D30
679-	+D30	802	9	796						
680-	CHEXA	331	9	769	775	776	770	803	809	+D31
681-	+D31	810	9	804						
682-	CHEXA	332	9	770	776	777	771	804	810	+D32
683-	+D32	811	9	805						
684-	CHEXA	333	9	771	777	778	772	805	811	+D33
685-	+D33	812	9	806						
686-	CHEXA	334	9	772	778	779	773	806	812	+D34
687-	+D34	813	9	807						
688-	CHEXA	335	9	773	779	780	774	807	813	+D35
689-	+D35	814	9	808						
690-	CHEXA	336	9	777	781	782	778	811	815	+D36
691-	+D36	816	9	812						
692-	CHEXA	337	9	781	783	784	782	815	817	+D37
693-	+D37	818	9	816						
694-	CHEXA	338	9	783	785	786	784	817	819	+D38
695-	+D38	820	9	818						
696-	CHEXA	339	9	785	787	788	786	819	821	+D39
697-	+D39	822	9	820						
698-	CHEXA	340	9	787	789	790	788	821	823	+D40
699-	+D40	824	9	822						
700-	CHEXA	341	9	789	793	794	790	823	827	+D41

CARD COUNT	1	2	3	4	5	6	7	8	9	10
701-	+D41	828	824							
702-	CHEXA	342		791	797	798	792	825	831	+D42
703-	+D42	832	826							
704-	CHEXA	343		792	798	799	793	826	832	+D43
705-	+D43	833	827							
706-	CHEXA	344		793	799	800	794	827	833	+D44
707-	+D44	834	828							
708-	CHEXA	345		794	800	801	795	825	834	+D45
709-	+D45	835	829							
710-	CHEXA	346		795	801	802	796	829	835	+D46
711-	+D46	836	830							
712-	CHEXA	347		803	809	810	804	837	843	+D47
713-	+D47	847	838							
714-	CHEXA	348		804	810	811	805	838	844	+D48
715-	+D48	845	839							
716-	CHEXA	349		805	811	812	806	839	845	+D49
717-	+D49	846	840							
718-	CHEXA	350		806	812	813	807	840	846	+D50
719-	+D50	847	841							
720-	CHEXA	351		807	813	814	808	841	847	+D51
721-	+D51	848	842							
722-	CHEXA	352		811	815	816	812	845	849	+D52
723-	+D52	850	846							
724-	CHEXA	353		815	817	818	816	849	851	+D53
725-	+D53	852	850							
726-	CHEXA	354		817	819	820	818	851	853	+D54
727-	+D54	854	852							
728-	CHEXA	355		819	821	822	820	853	855	+D55
729-	+D55	856	854							
730-	CHEXA	356		821	823	824	822	855	857	+D56
731-	+D56	858	856							
732-	CHEXA	357		823	827	828	824	857	861	+D57
733-	+D57	862	858							
734-	CHEXA	358		825	831	832	826	859	865	+D58
735-	+D58	866	860							
736-	CHEXA	359		826	832	833	827	860	866	+D59
737-	+D59	867	861							
738-	CHEXA	360		827	833	834	828	861	867	+D60
739-	+D60	868	862							
740-	CHEXA	361		828	834	835	829	862	868	+D61
741-	+D61	869	863							
742-	CHEXA	362		829	835	836	830	863	869	+D62
743-	+D62	870	864							
744-	CHEXA	363		837	843	844	838	871	877	+D63
745-	+D63	878	872							
746-	CHEXA	364		838	844	845	839	872	878	+D64
747-	+D64	879	873							
748-	CHEXA	365		839	845	846	840	873	879	+D65
749-	+D65	880	874							
750-	CHEXA	366		840	846	847	841	874	880	+D66
751-	+D66	881	875							
752-	CHEXA	367		841	847	848	842	875	881	+D67
753-	+D67	882	876							
754-	CHEXA	368		845	849	850	846	879	883	+D68
755-	+D68	884	880							
756-	CHEXA	369		849	851	852	850	883	885	+D69
757-	+D69	886	884							
758-	CHEXA	370		851	853	854	852	885	887	+D70
759-	+D70	888	886							
760-	CHEXA	371		853	855	856	854	887	889	+D71
761-	+D71	890	888							
762-	CHEXA	372		855	857	858	856	883	891	+D72
763-	+D72	892	890							
764-	CHEXA	373		857	861	862	858	891	895	+D73
765-	+D73	896	892							
766-	CHEXA	374		859	865	866	860	893	899	+D74
767-	+D74	900	894							
768-	CHEXA	375		860	866	867	861	894	900	+D75
769-	+D75	901	895							
770-	CHEXA	376		861	867	868	862	895	901	+D76
771-	+D76	902	896							
772-	CHEXA	377		862	868	869	863	896	902	+D77
773-	+D77	903	897							
774-	CHEXA	378		863	869	870	864	897	903	+D78
775-	+D78	904	898							
776-	CHEXA	379		871	877	878	872	905	911	+D79
777-	+D79	912	906							
778-	CHEXA	380		872	878	879	873	906	912	+D80
779-	+D80	913	907							
780-	CHEXA	381		873	879	880	874	907	913	+D81
781-	+D81	914	908							
782-	CHEXA	382		874	880	881	875	908	914	+D82
783-	+D82	915	909							
784-	CHEXA	383		875	881	882	876	903	915	+D83
785-	+D83	916	910							
786-	CHEXA	384		879	883	884	880	913	917	+D84
787-	+D84	918	914							
788-	CHEXA	385		883	885	886	884	917	919	+D85
789-	+D85	920	918							
790-	CHEXA	386		885	887	888	886	919	921	+D86
791-	+D86	922	920							
792-	CHEXA	387		887	889	890	888	921	923	+D87
793-	+D87	924	922							
794-	CHEXA	388		889	891	892	890	923	925	+D88
795-	+D88	926	924							
796-	CHEXA	389		891	895	896	892	925	929	+D89
797-	+D89	930	926							
798-	CHEXA	390		893	899	900	894	927	933	+D90
799-	+D90	934	928							
800-	CHEXA	391		894	900	901	895	928	934	+D91

CARD	POINT	1	2	3	4	5	6	7	8	9	10
801-		+D91	335	29							
802-		CHEXA	392	9	895	901	902	896	929	935	+D92
803-		+D92	936	9							
804-		CHEXA	393	30	896	902	903	897	930	936	+D93
805-		+D93	937	9							
806-		CHEXA	394	31	897	903	904	898	931	937	+D94
807-		+D94	938	9							
808-		CHEXA	395	32	905	911	912	906	939	945	+D95
809-		+D95	946	9							
810-		CHEXA	396	40	906	912	913	907	940	946	+D96
811-		+D96	947	9							
812-		CHEXA	397	41	907	913	914	908	941	947	+D97
813-		+D97	948	9							
814-		CHEXA	398	42	908	914	915	909	942	948	+D98
815-		+D98	949	9							
816-		CHEXA	399	43	909	915	916	910	943	949	+D99
817-		+D99	950	9							
818-		CHEXA	401	44	917	919	920	918	944	951	+E1
819-		+E1	952	9							
820-		CHEXA	402	48	919	921	922	920	948	953	+E2
821-		+E2	954	9							
822-		CHEXA	403	52	921	923	924	922	952	955	+E3
823-		+E3	956	9							
824-		CHEXA	404	54	923	925	926	924	954	959	+E4
825-		+E4	960	9							
826-		CHEXA	406	56	927	933	934	928	956	963	+E6
827-		+E6	964	9							
828-		CHEXA	407	58	928	934	935	929	958	964	+E7
829-		+E7	965	9							
830-		CHEXA	408	59	929	935	936	930	959	965	+E8
831-		+E8	966	9							
832-		CHEXA	409	9	930	936	937	931	960	966	+E9
833-		+E9	967	9							
834-		CHEXA	410	61	931	937	938	932	961	967	+E10
835-		+E10	968	9							
836-		CHEXA	411	62	939	945	946	940	962	975	+E11
837-		+E11	976	9							
838-		CHEXA	412	70	940	946	947	941	970	976	+E12
839-		+E12	977	9							
840-		CHEXA	413	71	941	947	948	942	971	977	+E13
841-		+E13	978	9							
842-		CHEXA	414	72	942	948	949	943	972	978	+E14
843-		+E14	979	9							
844-		CHEXA	415	73	943	949	950	944	973	979	+E15
845-		+E15	980	9							
846-		CHEXA	416	74	947	951	952	948	974	981	+E16
847-		+E16	982	9							
848-		CHEXA	417	78	951	953	954	952	978	983	+E17
849-		+E17	98U	9							
850-		CHEXA	418	82	953	955	956	954	982	985	+E18
851-		+E18	986	9							
852-		CHEXA	419	84	955	959	960	956	984	989	+E19
853-		4E19	990	9							
854-		CHEXA	420	86	957	963	964	958	986	993	+E20
855-		+E20	994	9							
856-		CHEXA	421	88	958	964	965	959	988	994	+E21
857-		+E21	995	9							
858-		CHEXA	422	89	959	965	966	960	989	995	+E22
859-		+E22	996	9							
860-		CHEXA	423	90	960	966	967	961	990	996	+E23
861-		+E23	997	9							
862-		CHEXA	424	91	961	967	968	962	991	997	+E24
863-		+E24	998	9							
864-		CHEXA	425	92	969	975	976	970	992	1005	+E25
865-		+E25	1006	9							
866-		CHEXA	426	1000	970	976	977	971	1000	1006	+E26
867-		+E26	1007	9							
868-		CHEXA	427	9	971	977	978	972	1001	1007	+E27
869-		+E27	1008	9							
870-		CHEXA	428	1002	972	978	979	973	1002	1008	+E28
871-		+E28	1009	9							
872-		CHEXA	429	1003	973	979	980	974	1003	1009	+E29
873-		+E29	1010	9							
874-		CHEXA	430	1004	977	981	982	978	1004	1011	+E30
875-		+E30	1012	9							
876-		CHEXA	431	1008	981	983	98U	982	1011	1013	+E31
877-		+E31	1014	9							
878-		CHEXA	432	1012	983	985	986	984	1013	1015	+E32
879-		+E32	1016	9							
880-		CHEXA	433	1014	985	989	990	986	1015	1019	+E33
881-		+E33	1020	9							
882-		CHEXA	434	1016	987	993	994	988	1017	1023	+E34
883-		+E34	1024	9							
884-		CHEXA	435	1018	988	994	995	989	1018	1024	+E35
885-		+E35	1025	9							
886-		CHEXA	436	1019	989	995	996	990	1019	1025	+E36
887-		+E36	1026	9							
888-		CHEXA	437	1020	990	996	997	991	1020	1026	+E37
889-		+E37	1027	9							
890-		CHEXA	438	1021	991	997	998	992	1021	1027	+E38
891-		+E38	1028	9							
892-		CHEXA	439	1022	999	1005	1006	1000	1022	1035	+E39
893-		+E39	1036	9							
894-		CHEXA	440	1030	1000	1006	1007	1001	1029	1036	+E40
895-		+E40	1037	9							
896-		CHEXA	441	1031	1001	1007	1008	1002	1031	1037	+E41
897-		+E41	1038	9							
898-		CHEXA	442	1032	1002	1008	1009	1003	1032	1038	+E42
899-		+E42	1039	9							
900-		CHEXA	443	1033	1003	1009	1010	1004	1033	1039	+E43

CARD	SORTED BULK DATA ECHO									
COUPT	1	2	3	4	5	6	7	8	9	10
901-	+E43	1040	1034							
902-	CHEXA	444	9	1007	1011	1012	1008	1037	1041	+E44
903-	+E44	1042	9	1011	1013	1014	1012	1041	1043	+E45
904-	CHEXA	445	9	1011	1013	1014	1012	1041	1043	+E45
905-	+E45	1044	9	1013	1015	1016	1014	1043	1045	+E46
906-	CHEXA	446	9	1013	1015	1016	1014	1043	1045	+E46
907-	+E46	1046	9	1015	1019	1020	1016	1045	1049	+E47
908-	CHEXA	447	9	1015	1019	1020	1016	1045	1049	+E47
909-	+E47	1050	9	1017	1023	1024	1018	1047	1053	+E48
910-	CHEXA	448	9	1017	1023	1024	1018	1047	1053	+E48
911-	+E48	1054	9	1017	1023	1024	1018	1047	1053	+E48
912-		449	9	1018	1024	1025	1019	1048	1054	+E49
913-		1055	9	1018	1024	1025	1019	1048	1054	+E49
914-	CHEXA	450	9	1019	1025	1026	1020	1049	1055	+E50
915-	+E50	1056	9	1019	1025	1026	1020	1049	1055	+E50
916-	CHEXA	451	9	1020	1026	1027	1021	1050	1056	+E51
917-	+E51	1057	9	1020	1026	1027	1021	1050	1056	+E51
918-	CHEXA	452	9	1021	1027	1028	1022	1051	1057	+E52
919-	+E52	1058	9	1021	1027	1028	1022	1051	1057	+E52
920-	CHEXA	453	9	1029	1035	1036	1030	1059	1065	+E53
921-	+E53	1066	9	1029	1035	1036	1030	1059	1065	+E53
922-	CHEXA	454	9	1030	1036	1037	1031	1060	1066	+E54
923-	+E54	1067	9	1030	1036	1037	1031	1060	1066	+E54
924-	CHEXA	455	9	1031	1037	1038	1032	1061	1067	+E55
925-	+E55	1068	9	1031	1037	1038	1032	1061	1067	+E55
926-	CHEXA	456	9	1032	1038	1039	1033	1062	1068	+E56
927-	+E56	1069	9	1032	1038	1039	1033	1062	1068	+E56
928-	CHEXA	457	9	1033	1039	1040	1034	1063	1069	+E57
929-	+E57	1070	9	1033	1039	1040	1034	1063	1069	+E57
930-	CHEXA	458	9	1037	1041	1042	1038	1067	1071	+E58
931-	+E58	1072	9	1037	1041	1042	1038	1067	1071	+E58
932-	CHEXA	459	9	1041	1043	1044	1042	1071	1073	+E59
933-	+E59	1074	9	1041	1043	1044	1042	1071	1073	+E59
934-	CHEXA	460	9	1043	1045	1046	1044	1073	1075	+E60
935-	+E60	1076	9	1043	1045	1046	1044	1073	1075	+E60
936-	CHEXA	461	9	1045	1049	1050	1046	1075	1079	+E61
937-	+E61	1080	9	1045	1049	1050	1046	1075	1079	+E61
938-	CHEXA	462	9	1047	1053	1054	1048	1077	1083	+E62
939-	+E62	1084	9	1047	1053	1054	1048	1077	1083	+E62
940-	CHEXA	463	9	1048	1054	1055	1049	1078	1084	+E63
941-	+E63	1085	9	1048	1054	1055	1049	1078	1084	+E63
942-	CHEXA	464	9	1049	1055	1056	1050	1079	1085	+E64
943-	+E64	1086	9	1049	1055	1056	1050	1079	1085	+E64
944-	CHEXA	465	9	1050	1056	1057	1051	1080	1086	+E65
945-	+E65	1087	9	1050	1056	1057	1051	1080	1086	+E65
946-	CHEXA	466	9	1051	1057	1058	1052	1081	1087	+E66
947-	+E66	1088	9	1051	1057	1058	1052	1081	1087	+E66
948-	CPENTA	400	9							
949-	CPENTA	405	9	913	917	947	914	918	948	
950-	FORCE	100	9	925	929	959	926	930	960	
951-	FORCE	100	78				49.	0.		
952-	FORCE	100	79				49.	0.		
953-	FORCE	100	80				49.	0.		
954-	FORCE	100	81				49.	0.		
955-	FORCE	100	133				49.	0.		
956-	FORCE	100	134				49.	0.		
957-	FORCE	100	135				49.	0.		
958-	FORCE	100	136				49.	0.		
959-	FORCE	100	279				0.	0.		
960-	FORCE	100	303				0.	0.		
961-	FORCE	100	327				0.	0.		
962-	FORCE	100	462				49.	0.		
963-	FORCE	100	463				49.	0.		
964-	FORCE	100	464				49.	0.		
965-	FORCE	100	465				49.	0.		
966-	FORCE	100	517				49.	0.		
967-	FORCE	100	518				49.	0.		
968-	FORCE	100	519				49.	0.		
969-	FORCE	100	520				49.	0.		
970-	FORCE	100	613				0.	0.		
971-	FORCE	100	614				0.	0.		
972-	FORCE	100	615				0.	0.		
973-	FORCE	100	616				0.	0.		
974-	FORCE	100	617				0.	0.		
975-	FORCE	100	618				0.	0.		
976-	FORCE	100	619				0.	0.		
977-	FORCE	100	620				0.	0.		
978-	FORCE	100	621				0.	0.		
979-	FORCE	100	622				0.	0.		
980-	FORCE	100	623				0.	0.		
981-	FORCE	100	624				0.	0.		
982-	FORCE	100	625				0.	0.		
983-	FORCE	100	626				0.	0.		
984-	FORCE	100	627				0.	0.		
985-	FORCE	100	628				0.	0.		
986-	FORCE	100	629				0.	0.		
987-	FORCE	100	630				0.	0.		
988-	FORCE	100	631				0.	0.		
989-	FORCE	100	632				0.	0.		
990-	FORCE	100	681				0.	0.		
991-	FORCE	100	683				0.	0.		
992-	FORCE	100	685				0.	0.		
993-	FORCE	100	708				0.	0.		
994-	FORCE	100	711				0.	0.		
995-	FORCE	100	724				0.	0.		
996-	FORCE	100	727				0.	0.		
997-	FORCE	100	742				0.	0.		
998-	FORCE	100	745				0.	0.		
999-	FORCE	100	758				0.	0.		
1000-	FORCE	100	761				0.	0.		
			776				0.	0.		

CARD	1	2	3	4	5	6	7	8	9	10
001	FORCE	100	779			0.		0.		
002	FORCE	100	792			0.		0.		
003	FORCE	100	795			0.		0.		
004	FORCE	100	810			0.		0.		
005	FORCE	100	813			0.		0.		
006	FORCE	100	826			0.		0.		
007	FORCE	100	829			0.		0.		
008	GRID	1		4	0.	0.		3456		
009	GRID	1		5	0.	0.				
010	GRID	1		4	0.	2.	25			
011	GRID	1		4	0.	2.	25			
012	GRID	1		5	0.	2.	25			
013	GRID	1		4	0.	2.	25			
014	GRID	1		4	0.	2.	25			
015	GRID	1		4	0.	2.	25			
016	GRID	1		4	0.	2.	25			
017	GRID	1		4	0.	2.	25			
018	GRID	1		4	0.	2.	25			
019	GRID	1		4	0.	2.	25			
020	GRID	1		4	0.	2.	25			
021	GRID	1		4	0.	2.	25			
022	GRID	1		4	0.	2.	25			
023	GRID	1		4	0.	2.	25			
024	GRID	1		4	0.	2.	25			
025	GRID	1		4	0.	2.	25			
026	GRID	1		4	0.	2.	25			
027	GRID	1		4	0.	2.	25			
028	GRID	1		4	0.	2.	25			
029	GRID	1		4	0.	2.	25			
030	GRID	1		4	0.	2.	25			
031	GRID	1		4	0.	2.	25			
032	GRID	1		4	0.	2.	25			
033	GRID	1		4	0.	2.	25			
034	GRID	1		4	0.	2.	25			
035	GRID	1		4	0.	2.	25			
036	GRID	1		4	0.	2.	25			
037	GRID	1		4	0.	2.	25			
038	GRID	1		4	0.	2.	25			
039	GRID	1		4	0.	2.	25			
040	GRID	1		4	0.	2.	25			
041	GRID	1		4	0.	2.	25			
042	GRID	1		4	0.	2.	25			
043	GRID	1		4	0.	2.	25			
044	GRID	1		4	0.	2.	25			
045	GRID	1		4	0.	2.	25			
046	GRID	1		4	0.	2.	25			
047	GRID	1		4	0.	2.	25			
048	GRID	1		4	0.	2.	25			
049	GRID	1		4	0.	2.	25			
050	GRID	1		4	0.	2.	25			
051	GRID	1		4	0.	2.	25			
052	GRID	1		4	0.	2.	25			
053	GRID	1		4	0.	2.	25			
054	GRID	1		4	0.	2.	25			
055	GRID	1		4	0.	2.	25			
056	GRID	1		4	0.	2.	25			
057	GRID	1		4	0.	2.	25			
058	GRID	1		4	0.	2.	25			
059	GRID	1		4	0.	2.	25			
060	GRID	1		4	0.	2.	25			
061	GRID	1		4	0.	2.	25			
062	GRID	1		4	0.	2.	25			
063	GRID	1		4	0.	2.	25			
064	GRID	1		4	0.	2.	25			
065	GRID	1		4	0.	2.	25			
066	GRID	1		4	0.	2.	25			
067	GRID	1		4	0.	2.	25			
068	GRID	1		4	0.	2.	25			
069	GRID	1		4	0.	2.	25			
070	GRID	1		4	0.	2.	25			
071	GRID	1		4	0.	2.	25			
072	GRID	1		4	0.	2.	25			
073	GRID	1		4	0.	2.	25			
074	GRID	1		4	0.	2.	25			
075	GRID	1		4	0.	2.	25			
076	GRID	1		4	0.	2.	25			
077	GRID	1		4	0.	2.	25			
078	GRID	1		4	0.	2.	25			
079	GRID	1		4	0.	2.	25			
080	GRID	1		4	0.	2.	25			
081	GRID	1		4	0.	2.	25			
082	GRID	1		4	0.	2.	25			
083	GRID	1		4	0.	2.	25			
084	GRID	1		4	0.	2.	25			
085	GRID	1		4	0.	2.	25			
086	GRID	1		4	0.	2.	25			
087	GRID	1		4	0.	2.	25			
088	GRID	1		4	0.	2.	25			
089	GRID	1		4	0.	2.	25			
090	GRID	1		4	0.	2.	25			
091	GRID	1		4	0.	2.	25			
092	GRID	1		4	0.	2.	25			
093	GRID	1		4	0.	2.	25			
094	GRID	1		4	0.	2.	25			
095	GRID	1		4	0.	2.	25			
096	GRID	1		4	0.	2.	25			
097	GRID	1		4	0.	2.	25			
098	GRID	1		4	0.	2.	25			
099	GRID	1		4	0.	2.	25			
100	GRID	1		4	0.	2.	25			

CARD	GRID	3	4	5	6	7	8	9	10
1101	GRID	93	0.	20.	4.	29			
1102	GRID	94	0.	20.	4.	29	13456		
1103	GRID	95	2.	22	4.	29			
1104	GRID	96	4.	22	4.	29			
1105	GRID	97	5.	125	4.	29			
1106	GRID	98	6.	875	4.	29			
1107	GRID	99	8.	555	4.	29			
1108	GRID	100	10.	125	4.	29			
1109	GRID	101	13.	125	4.	29			
1110	GRID	102	16.	125	4.	29			
1111	GRID	103	19.	125	4.	29			
1112	GRID	104	20.	875	4.	29	13456		
1113	GRID	105	0.	0.	4.	29			
1114	GRID	106	2.	22	4.	29			
1115	GRID	107	4.	45	4.	29			
1116	GRID	108	5.	125	4.	29			
1117	GRID	109	6.	875	4.	29			
1118	GRID	110	8.	555	4.	29			
1119	GRID	111	10.	125	4.	29			
1120	GRID	112	13.	125	4.	29			
1121	GRID	113	16.	125	4.	29			
1122	GRID	114	19.	125	4.	29			
1123	GRID	115	20.	875	4.	29	13456		
1124	GRID	116	0.	0.	4.	29			
1125	GRID	117	2.	22	4.	29			
1126	GRID	118	4.	45	4.	29			
1127	GRID	119	5.	125	4.	29			
1128	GRID	120	6.	875	4.	29			
1129	GRID	121	8.	555	4.	29			
1130	GRID	122	10.	125	4.	29			
1131	GRID	123	13.	125	4.	29			
1132	GRID	124	16.	125	4.	29			
1133	GRID	125	19.	125	4.	29			
1134	GRID	126	20.	875	4.	29	13456		
1135	GRID	127	0.	0.	4.	29			
1136	GRID	128	2.	22	4.	29			
1137	GRID	129	4.	45	4.	29			
1138	GRID	130	5.	125	4.	29			
1139	GRID	131	6.	875	4.	29			
1140	GRID	132	8.	555	4.	29			
1141	GRID	133	10.	125	4.	29			
1142	GRID	134	13.	125	4.	29			
1143	GRID	135	16.	125	4.	29			
1144	GRID	136	19.	125	4.	29			
1145	GRID	137	20.	875	4.	29	13456		
1146	GRID	138	0.	0.	4.	29			
1147	GRID	139	2.	22	4.	29			
1148	GRID	140	4.	45	4.	29			
1149	GRID	141	5.	125	4.	29			
1150	GRID	142	6.	875	4.	29			
1151	GRID	143	8.	555	4.	29			
1152	GRID	144	10.	125	4.	29			
1153	GRID	145	13.	125	4.	29			
1154	GRID	146	16.	125	4.	29			
1155	GRID	147	19.	125	4.	29			
1156	GRID	148	20.	875	4.	29	13456		
1157	GRID	149	0.	0.	4.	29			
1158	GRID	150	2.	22	4.	29			
1159	GRID	151	4.	45	4.	29			
1160	GRID	152	5.	125	4.	29			
1161	GRID	153	6.	875	4.	29			
1162	GRID	154	8.	555	4.	29			
1163	GRID	155	10.	125	4.	29			
1164	GRID	156	13.	125	4.	29			
1165	GRID	157	16.	125	4.	29			
1166	GRID	158	19.	125	4.	29			
1167	GRID	159	20.	875	4.	29	13456		
1168	GRID	160	0.	0.	4.	29			
1169	GRID	161	2.	22	4.	29			
1170	GRID	162	4.	45	4.	29			
1171	GRID	163	5.	125	4.	29			
1172	GRID	164	6.	875	4.	29			
1173	GRID	165	8.	555	4.	29			
1174	GRID	166	10.	125	4.	29			
1175	GRID	167	13.	125	4.	29			
1176	GRID	168	16.	125	4.	29			
1177	GRID	169	19.	125	4.	29			
1178	GRID	170	20.	875	4.	29	13456		
1179	GRID	171	0.	0.	4.	29			
1180	GRID	172	2.	22	4.	29			
1181	GRID	173	4.	45	4.	29			
1182	GRID	174	5.	125	4.	29			
1183	GRID	175	6.	875	4.	29			
1184	GRID	176	8.	555	4.	29			
1185	GRID	177	10.	125	4.	29			
1186	GRID	178	13.	125	4.	29			
1187	GRID	179	16.	125	4.	29			
1188	GRID	180	19.	125	4.	29			
1189	GRID	181	20.	875	4.	29	13456		
1190	GRID	182	0.	0.	4.	29			
1191	GRID	183	2.	22	4.	29			
1192	GRID	184	4.	45	4.	29			
1193	GRID	185	5.	125	4.	29			
1194	GRID	186	6.	875	4.	29			
1195	GRID	187	8.	555	4.	29			
1196	GRID	188	10.	125	4.	29			
1197	GRID	189	13.	125	4.	29			
1198	GRID	190	16.	125	4.	29			
1199	GRID	191	19.	125	4.	29			
1200	GRID	192	20.	875	4.	29			

SORTED BULK DATA ECHO

CARD	1	2	3	4	5	6	7	8	9	10
301	GRID	293	4.45	22	5.85	4.79				
302	GRID	294	5.125	22	5.85	4.79				
303	GRID	295	0.	22	5.85	5.23	13456			
304	GRID	296	2.22	22	5.85	5.23				
305	GRID	297	4.45	22	5.85	5.23				
306	GRID	298	5.125	22	5.85	5.23				
307	GRID	299	8.625	22	5.85	5.23				
308	GRID	300	10.375	22	5.85	5.23				
309	GRID	301	4.45	22	5.85	5.73				
310	GRID	302	5.125	22	5.85	5.73				
311	GRID	303	8.625	22	5.85	5.73				
312	GRID	304	10.375	22	5.85	5.73				
313	GRID	305	4.45	22	5.85	7.77				
314	GRID	306	5.125	22	5.85	7.77				
315	GRID	307	4.45	22	5.85	10.02				
316	GRID	308	5.125	22	5.85	10.02				
317	GRID	309	4.45	22	5.85	0.				
318	GRID	310	5.125	22	5.85	2.25				
319	GRID	311	4.45	22	5.85	2.25				
320	GRID	312	5.125	22	5.85	2.25				
321	GRID	313	4.45	22	5.85	4.79	13456			
322	GRID	314	5.125	22	5.85	4.79				
323	GRID	315	0.	22	5.85	4.79				
324	GRID	316	2.22	22	5.85	4.79				
325	GRID	317	4.45	22	5.85	4.79				
326	GRID	318	5.125	22	5.85	4.79				
327	GRID	319	0.	22	5.85	5.23	13456			
328	GRID	320	2.22	22	5.85	5.23				
329	GRID	321	4.45	22	5.85	5.23				
330	GRID	322	5.125	22	5.85	5.23				
331	GRID	323	8.625	22	5.85	5.23				
332	GRID	324	10.375	22	5.85	5.23				
333	GRID	325	4.45	22	5.85	5.73				
334	GRID	326	5.125	22	5.85	5.73				
335	GRID	327	8.625	22	5.85	5.73				
336	GRID	328	10.375	22	5.85	5.73				
337	GRID	329	4.45	22	5.85	7.77				
338	GRID	330	5.125	22	5.85	7.77				
339	GRID	331	4.45	22	5.85	10.02				
340	GRID	332	5.125	22	5.85	10.02				
341	GRID	333	4.45	22	5.85	0.				
342	GRID	334	5.125	22	5.85	2.25				
343	GRID	335	4.45	22	5.85	2.25				
344	GRID	336	5.125	22	5.85	2.25				
345	GRID	337	4.45	22	5.85	2.25				
346	GRID	338	5.125	22	5.85	2.25				
347	GRID	339	0.	22	5.85	4.79	13456			
348	GRID	340	2.22	22	5.85	4.79				
349	GRID	341	4.45	22	5.85	4.79				
350	GRID	342	5.125	22	5.85	4.79				
351	GRID	343	0.	22	5.85	5.23	13456			
352	GRID	344	2.22	22	5.85	5.23				
353	GRID	345	4.45	22	5.85	5.23				
354	GRID	346	5.125	22	5.85	5.23				
355	GRID	347	8.625	22	5.85	5.23				
356	GRID	348	10.375	22	5.85	5.23				
357	GRID	349	4.45	22	5.85	7.77				
358	GRID	350	5.125	22	5.85	7.77				
359	GRID	351	8.625	22	5.85	7.77				
360	GRID	352	10.375	22	5.85	7.77				
361	GRID	353	4.45	22	5.85	10.02				
362	GRID	354	5.125	22	5.85	10.02				
363	GRID	355	4.45	22	5.85	0.				
364	GRID	356	5.125	22	5.85	0.	13456			
365	GRID	357	0.	22	5.85	0.				
366	GRID	358	2.22	22	5.85	0.				
367	GRID	359	4.45	22	5.85	0.				
368	GRID	360	5.125	22	5.85	0.				
369	GRID	361	8.625	22	5.85	0.				
370	GRID	362	10.375	22	5.85	0.				
371	GRID	363	4.45	22	5.85	0.				
372	GRID	364	13.125	22	5.85	0.				
373	GRID	365	16.125	22	5.85	0.				
374	GRID	366	19.125	22	5.85	0.				
375	GRID	367	20.875	22	5.85	0.				
376	GRID	368	0.	22	5.85	2.25	13456			
377	GRID	369	2.22	22	5.85	2.25				
378	GRID	370	4.45	22	5.85	2.25				
379	GRID	371	5.125	22	5.85	2.25				
380	GRID	372	6.875	22	5.85	2.25				
381	GRID	373	8.625	22	5.85	2.25				
382	GRID	374	10.375	22	5.85	2.25				
383	GRID	375	13.125	22	5.85	2.25				
384	GRID	376	16.125	22	5.85	2.25				
385	GRID	377	19.125	22	5.85	2.25				
386	GRID	378	20.875	22	5.85	2.25				
387	GRID	379	0.	22	5.85	4.29	13456			
388	GRID	380	2.22	22	5.85	4.29				
389	GRID	381	4.45	22	5.85	4.29				
390	GRID	382	5.125	22	5.85	4.29				
391	GRID	383	6.875	22	5.85	4.29				
392	GRID	384	8.625	22	5.85	4.29				
393	GRID	385	10.375	22	5.85	4.29				
394	GRID	386	13.125	22	5.85	4.29				
395	GRID	387	16.125	22	5.85	4.29				
396	GRID	388	19.125	22	5.85	4.29				
397	GRID	389	20.875	22	5.85	4.29				
398	GRID	390	0.	22	5.85	4.79	13456			
399	GRID	391	2.22	22	5.85	4.79				
400	GRID	392	4.45	22	5.85	4.79				

CARD	SORTED	BULK	DATA	ECHO	9	10
COUNT	1	2	3	4	5	6
1401-	GRID	393	5.125	29.67	4.79	
1402-	GRID	394	6.875	29.67	4.79	
1403-	GRID	395	8.625	29.67	4.79	
1404-	GRID	396	10.375	29.67	4.79	
1405-	GRID	397	12.125	29.67	4.79	
1406-	GRID	398	13.875	29.67	4.79	
1407-	GRID	399	15.625	29.67	4.79	
1408-	GRID	400	17.375	29.67	4.79	
1409-	GRID	401	19.125	29.67	4.79	13456
1410-	GRID	402	20.875	29.67	4.79	
1411-	GRID	403	0.0	29.67	4.79	
1412-	GRID	404	2.22	29.67	4.79	
1413-	GRID	405	4.45	29.67	4.79	
1414-	GRID	406	6.675	29.67	4.79	
1415-	GRID	407	8.9	29.67	4.79	
1416-	GRID	408	11.125	29.67	4.79	
1417-	GRID	409	13.35	29.67	4.79	
1418-	GRID	410	15.575	29.67	4.79	
1419-	GRID	411	17.8	29.67	4.79	
1420-	GRID	412	20.025	29.67	4.79	13456
1421-	GRID	413	0.0	29.67	4.79	
1422-	GRID	414	2.22	29.67	4.79	
1423-	GRID	415	4.45	29.67	4.79	
1424-	GRID	416	6.675	29.67	4.79	
1425-	GRID	417	8.9	29.67	4.79	
1426-	GRID	418	11.125	29.67	4.79	
1427-	GRID	419	13.35	29.67	4.79	
1428-	GRID	420	15.575	29.67	4.79	
1429-	GRID	421	17.8	29.67	4.79	
1430-	GRID	422	20.025	29.67	4.79	13456
1431-	GRID	423	0.0	29.67	4.79	
1432-	GRID	424	2.22	29.67	4.79	
1433-	GRID	425	4.45	29.67	4.79	
1434-	GRID	426	6.675	29.67	4.79	
1435-	GRID	427	8.9	29.67	4.79	
1436-	GRID	428	11.125	29.67	4.79	
1437-	GRID	429	13.35	29.67	4.79	
1438-	GRID	430	15.575	29.67	4.79	
1439-	GRID	431	17.8	29.67	4.79	
1440-	GRID	432	20.025	29.67	4.79	
1441-	GRID	433	0.0	29.67	4.79	13456
1442-	GRID	434	2.22	29.67	4.79	
1443-	GRID	435	4.45	29.67	4.79	
1444-	GRID	436	6.675	29.67	4.79	
1445-	GRID	437	8.9	29.67	4.79	
1446-	GRID	438	11.125	29.67	4.79	
1447-	GRID	439	13.35	29.67	4.79	
1448-	GRID	440	15.575	29.67	4.79	
1449-	GRID	441	17.8	29.67	4.79	
1450-	GRID	442	20.025	29.67	4.79	
1451-	GRID	443	0.0	29.67	4.79	13456
1452-	GRID	444	2.25	30.8	0.0	
1453-	GRID	445	4.45	30.8	0.0	
1454-	GRID	446	6.675	30.8	0.0	
1455-	GRID	447	8.9	30.8	0.0	
1456-	GRID	448	11.125	30.8	0.0	
1457-	GRID	449	13.35	30.8	0.0	
1458-	GRID	450	15.575	30.8	0.0	
1459-	GRID	451	17.8	30.8	0.0	
1460-	GRID	452	20.025	30.8	0.0	
1461-	GRID	453	0.0	30.8	0.0	
1462-	GRID	454	2.22	30.8	0.0	
1463-	GRID	455	4.45	30.8	0.0	13456
1464-	GRID	456	6.675	30.8	0.0	
1465-	GRID	457	8.9	30.8	0.0	
1466-	GRID	458	11.125	30.8	0.0	
1467-	GRID	459	13.35	30.8	0.0	
1468-	GRID	460	15.575	30.8	0.0	
1469-	GRID	461	17.8	30.8	0.0	
1470-	GRID	462	20.025	30.8	0.0	
1471-	GRID	463	0.0	30.8	0.0	
1472-	GRID	464	2.22	30.8	0.0	
1473-	GRID	465	4.45	30.8	0.0	
1474-	GRID	466	6.675	30.8	0.0	13456
1475-	GRID	467	8.9	30.8	0.0	
1476-	GRID	468	11.125	30.8	0.0	
1477-	GRID	469	13.35	30.8	0.0	
1478-	GRID	470	15.575	30.8	0.0	
1479-	GRID	471	17.8	30.8	0.0	
1480-	GRID	472	20.025	30.8	0.0	
1481-	GRID	473	0.0	30.8	0.0	
1482-	GRID	474	2.22	30.8	0.0	
1483-	GRID	475	4.45	30.8	0.0	
1484-	GRID	476	6.675	30.8	0.0	
1485-	GRID	477	8.9	30.8	0.0	13456
1486-	GRID	478	11.125	30.8	0.0	
1487-	GRID	479	13.35	30.8	0.0	
1488-	GRID	480	15.575	30.8	0.0	
1489-	GRID	481	17.8	30.8	0.0	
1490-	GRID	482	20.025	30.8	0.0	
1491-	GRID	483	0.0	30.8	0.0	
1492-	GRID	484	2.22	30.8	0.0	
1493-	GRID	485	4.45	30.8	0.0	
1494-	GRID	486	6.675	30.8	0.0	
1495-	GRID	487	8.9	30.8	0.0	
1496-	GRID	488	11.125	30.8	0.0	13456
1497-	GRID	489	13.35	30.8	0.0	
1498-	GRID	490	15.575	30.8	0.0	
1499-	GRID	491	17.8	30.8	0.0	
1500-	GRID	492	20.025	30.8	0.0	

CARD	1	2	3	4	5	6	7	8	9	10
1501	GRID	49	8.87	30	0.0	5.23				
1502	GRID	49	6.62	30	0.0	5.73				
1503	GRID	49	10.17	30	0.0	5.73				
1504	GRID	49	13.17	30	0.0	5.73				
1505	GRID	49	16.17	30	0.0	5.73				
1506	GRID	49	19.17	30	0.0	5.73				
1507	GRID	49	20.87	30	0.0	5.73				
1508	GRID	50	0.0	30	0.0	5.73			13456	
1509	GRID	50	4.22	30	0.0	5.73				
1510	GRID	50	8.45	30	0.0	5.73				
1511	GRID	50	5.125	30	0.0	5.73				
1512	GRID	50	8.875	30	0.0	5.73				
1513	GRID	50	6.625	30	0.0	5.73				
1514	GRID	50	10.125	30	0.0	5.73				
1515	GRID	50	13.125	30	0.0	5.73				
1516	GRID	50	16.125	30	0.0	5.73				
1517	GRID	50	19.125	30	0.0	5.73				
1518	GRID	51	20.87	30	0.0	5.73				
1519	GRID	51	0.0	30	0.0	7.77			13456	
1520	GRID	51	2.22	30	0.0	7.77				
1521	GRID	51	4.45	30	0.0	7.77				
1522	GRID	51	5.125	30	0.0	7.77				
1523	GRID	51	6.875	30	0.0	7.77				
1524	GRID	51	10.625	30	0.0	7.77				
1525	GRID	51	10.125	30	0.0	7.77				
1526	GRID	51	13.125	30	0.0	7.77				
1527	GRID	51	16.125	30	0.0	7.77				
1528	GRID	51	19.125	30	0.0	7.77				
1529	GRID	51	20.87	30	0.0	7.77				
1530	GRID	52	0.0	30	0.0	10.02			13456	
1531	GRID	52	2.22	30	0.0	10.02				
1532	GRID	52	4.45	30	0.0	10.02				
1533	GRID	52	5.125	30	0.0	10.02				
1534	GRID	52	6.875	30	0.0	10.02				
1535	GRID	52	10.625	30	0.0	10.02				
1536	GRID	52	10.125	30	0.0	10.02				
1537	GRID	52	13.125	30	0.0	10.02				
1538	GRID	52	16.125	30	0.0	10.02				
1539	GRID	52	19.125	30	0.0	10.02				
1540	GRID	52	20.87	30	0.0	10.02				
1541	GRID	53	4.45	33	56	0.0				
1542	GRID	53	5.125	33	56	2.25				
1543	GRID	53	4.45	33	56	2.25				
1544	GRID	53	5.125	33	56	4.29				
1545	GRID	53	4.45	33	56	4.29				
1546	GRID	53	5.125	33	56	4.79			13456	
1547	GRID	53	0.0	33	56	4.79				
1548	GRID	53	2.22	33	56	4.79				
1549	GRID	53	4.45	33	56	4.79				
1550	GRID	53	5.125	33	56	4.79				
1551	GRID	53	0.0	33	56	5.23			13456	
1552	GRID	53	2.22	33	56	5.23				
1553	GRID	53	4.45	33	56	5.23				
1554	GRID	53	5.125	33	56	5.23				
1555	GRID	53	4.45	33	56	5.73				
1556	GRID	53	5.125	33	56	5.73				
1557	GRID	53	4.45	33	56	7.77				
1558	GRID	53	5.125	33	56	7.77				
1559	GRID	53	4.45	33	56	10.02				
1560	GRID	53	5.125	33	56	10.02				
1561	GRID	53	4.45	33	56	0.0				
1562	GRID	53	5.125	33	56	2.25				
1563	GRID	53	4.45	33	56	4.29				
1564	GRID	53	5.125	33	56	4.29				
1565	GRID	53	4.45	33	56	4.79			13456	
1566	GRID	53	5.125	33	56	4.79				
1567	GRID	53	0.0	33	56	4.79				
1568	GRID	53	2.22	33	56	4.79				
1569	GRID	53	4.45	33	56	4.79				
1570	GRID	53	5.125	33	56	5.23			13456	
1571	GRID	53	0.0	33	56	5.23				
1572	GRID	53	2.22	33	56	5.23				
1573	GRID	53	4.45	33	56	5.23				
1574	GRID	53	5.125	33	56	5.73				
1575	GRID	53	4.45	33	56	5.73				
1576	GRID	53	5.125	33	56	7.77				
1577	GRID	53	4.45	33	56	7.77				
1578	GRID	53	5.125	33	56	7.77				
1579	GRID	53	4.45	33	56	10.02				
1580	GRID	53	5.125	33	56	10.02				
1581	GRID	53	4.45	46	19	0.0				
1582	GRID	53	5.125	46	19	2.25				
1583	GRID	53	4.45	46	19	2.25				
1584	GRID	53	5.125	46	19	4.29				
1585	GRID	53	4.45	46	19	4.29				
1586	GRID	53	5.125	46	19	4.29				
1587	GRID	53	0.0	46	19	4.79			13456	
1588	GRID	53	2.22	46	19	4.79				
1589	GRID	53	4.45	46	19	4.79				
1590	GRID	53	5.125	46	19	4.79				
1591	GRID	53	0.0	46	19	5.23			13456	
1592	GRID	53	2.22	46	19	5.23				
1593	GRID	53	4.45	46	19	5.23				
1594	GRID	53	5.125	46	19	5.23				
1595	GRID	53	4.45	46	19	5.73				
1596	GRID	53	5.125	46	19	5.73				
1597	GRID	53	4.45	46	19	7.77				
1598	GRID	53	5.125	46	19	7.77				
1599	GRID	53	4.45	46	19	10.02				
1600	GRID	53	5.125	46	19	10.02				

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1601	GRID	593	55	55	55	00				
1602	GRID	594	55	55	55	00				
1603	GRID	595	55	55	55	00				
1604	GRID	596	55	55	55	00				
1605	GRID	597	55	55	55	00				
1606	GRID	598	55	55	55	00				
1607	GRID	599	55	55	55	00			13456	
1608	GRID	600	55	55	55	00				
1609	GRID	601	55	55	55	00				
1610	GRID	602	55	55	55	00				
1611	GRID	603	55	55	55	00			13456	
1612	GRID	604	55	55	55	00				
1613	GRID	605	55	55	55	00				
1614	GRID	606	55	55	55	00				
1615	GRID	607	55	55	55	00				
1616	GRID	608	55	55	55	00				
1617	GRID	609	55	55	55	00				
1618	GRID	610	55	55	55	00				
1619	GRID	611	55	55	55	00			10.02	
1620	GRID	612	55	55	55	00			10.02	
1621	GRID	613	55	55	55	00				
1622	GRID	614	55	55	55	00				
1623	GRID	615	55	55	55	00				
1624	GRID	616	55	55	55	00				
1625	GRID	617	55	55	55	00				
1626	GRID	618	55	55	55	00				
1627	GRID	619	55	55	55	00			13456	
1628	GRID	620	55	55	55	00				
1629	GRID	621	55	55	55	00				
1630	GRID	622	55	55	55	00				
1631	GRID	623	55	55	55	00			13456	
1632	GRID	624	55	55	55	00				
1633	GRID	625	55	55	55	00				
1634	GRID	626	55	55	55	00				
1635	GRID	627	55	55	55	00				
1636	GRID	628	55	55	55	00				
1637	GRID	629	55	55	55	00				
1638	GRID	630	55	55	55	00				
1639	GRID	631	55	55	55	00				
1640	GRID	632	55	55	55	00				
1641	GRID	633	55	55	55	00				
1642	GRID	634	55	55	55	00				
1643	GRID	635	55	55	55	00				
1644	GRID	636	55	55	55	00				
1645	GRID	637	55	55	55	00				
1646	GRID	638	55	55	55	00				
1647	GRID	639	55	55	55	00				
1648	GRID	640	55	55	55	00				
1649	GRID	641	55	55	55	00				
1650	GRID	642	55	55	55	00				
1651	GRID	643	55	55	55	00				
1652	GRID	644	55	55	55	00				
1653	GRID	645	55	55	55	00				
1654	GRID	646	55	55	55	00				
1655	GRID	647	55	55	55	00				
1656	GRID	648	55	55	55	00				
1657	GRID	649	55	55	55	00				
1658	GRID	650	55	55	55	00				
1659	GRID	651	55	55	55	00				
1660	GRID	652	55	55	55	00				
1661	GRID	653	55	55	55	00				
1662	GRID	654	55	55	55	00				
1663	GRID	655	55	55	55	00				
1664	GRID	656	55	55	55	00				
1665	GRID	657	55	55	55	00				
1666	GRID	658	55	55	55	00				
1667	GRID	659	55	55	55	00				
1668	GRID	660	55	55	55	00				
1669	GRID	661	55	55	55	00				
1670	GRID	662	55	55	55	00				
1671	GRID	663	55	55	55	00				
1672	GRID	664	55	55	55	00				
1673	GRID	665	55	55	55	00				
1674	GRID	666	55	55	55	00				
1675	GRID	667	55	55	55	00				
1676	GRID	668	55	55	55	00				
1677	GRID	669	55	55	55	00				
1678	GRID	670	55	55	55	00				
1679	GRID	671	55	55	55	00				
1680	GRID	672	55	55	55	00				
1681	GRID	673	55	55	55	00				
1682	GRID	674	55	55	55	00				
1683	GRID	675	55	55	55	00				
1684	GRID	676	55	55	55	00				
1685	GRID	677	55	55	55	00				
1686	GRID	678	55	55	55	00				
1687	GRID	679	55	55	55	00				
1688	GRID	680	55	55	55	00				
1689	GRID	681	55	55	55	00				
1690	GRID	682	55	55	55	00				
1691	GRID	683	55	55	55	00				
1692	GRID	684	55	55	55	00				
1693	GRID	685	55	55	55	00				
1694	GRID	686	55	55	55	00				
1695	GRID	687	55	55	55	00				
1696	GRID	688	55	55	55	00				
1697	GRID	689	55	55	55	00				
1698	GRID	690	55	55	55	00				
1699	GRID	691	55	55	55	00				
1700	GRID	692	55	55	55	00				

CARD	1	2	3	4	5	6	8	9	10
COUNT		693		62	16	17			
1701-	GRID	694		62	16	17			
1702-	GRID	695		62	16	17			
1703-	GRID	696		62	16	17			
1704-	GRID	697		62	16	17			
1705-	GRID	698		62	16	17			
1706-	GRID	699		62	16	17			
1707-	GRID	700		62	16	17			
1708-	GRID	701		62	16	17			
1709-	GRID	702		62	16	17			
1710-	GRID	703		62	16	17			
1711-	GRID	704		62	16	17			
1712-	GRID	705		62	16	17			
1713-	GRID	706		62	16	17			
1714-	GRID	707		62	16	17			
1715-	GRID	708		62	16	17			
1716-	GRID	709		62	16	17			
1717-	GRID	710		62	16	17			
1718-	GRID	711		62	16	17			
1719-	GRID	712		62	16	17			
1720-	GRID	713		62	16	17			
1721-	GRID	714		62	16	17			
1722-	GRID	715		62	16	17			
1723-	GRID	716		62	16	17			
1724-	GRID	717		62	16	17			
1725-	GRID	718		62	16	17			
1726-	GRID	719		62	16	17			
1727-	GRID	720		62	16	17			
1728-	GRID	721		62	16	17			
1729-	GRID	722		62	16	17			
1730-	GRID	723		62	16	17			
1731-	GRID	724		62	16	17			
1732-	GRID	725		62	16	17			
1733-	GRID	726		62	16	17			
1734-	GRID	727		62	16	17			
1735-	GRID	728		62	16	17			
1736-	GRID	729		62	16	17			
1737-	GRID	730		62	16	17			
1738-	GRID	731		62	16	17			
1739-	GRID	732		62	16	17			
1740-	GRID	733		62	16	17			
1741-	GRID	734		62	16	17			
1742-	GRID	735		62	16	17			
1743-	GRID	736		62	16	17			
1744-	GRID	737		62	16	17			
1745-	GRID	738		62	16	17			
1746-	GRID	739		62	16	17			
1747-	GRID	740		62	16	17			
1748-	GRID	741		62	16	17			
1749-	GRID	742		62	16	17			
1750-	GRID	743		62	16	17			
1751-	GRID	744		62	16	17			
1752-	GRID	745		62	16	17			
1753-	GRID	746		62	16	17			
1754-	GRID	747		62	16	17			
1755-	GRID	748		62	16	17			
1756-	GRID	749		62	16	17			
1757-	GRID	750		62	16	17			
1758-	GRID	751		62	16	17			
1759-	GRID	752		62	16	17			
1760-	GRID	753		62	16	17			
1761-	GRID	754		62	16	17			
1762-	GRID	755		62	16	17			
1763-	GRID	756		62	16	17			
1764-	GRID	757		62	16	17			
1765-	GRID	758		62	16	17			
1766-	GRID	759		62	16	17			
1767-	GRID	760		62	16	17			
1768-	GRID	761		62	16	17			
1769-	GRID	762		62	16	17			
1770-	GRID	763		62	16	17			
1771-	GRID	764		62	16	17			
1772-	GRID	765		62	16	17			
1773-	GRID	766		62	16	17			
1774-	GRID	767		62	16	17			
1775-	GRID	768		62	16	17			
1776-	GRID	769		62	16	17			
1777-	GRID	770		62	16	17			
1778-	GRID	771		62	16	17			
1779-	GRID	772		62	16	17			
1780-	GRID	773		62	16	17			
1781-	GRID	774		62	16	17			
1782-	GRID	775		62	16	17			
1783-	GRID	776		62	16	17			
1784-	GRID	777		62	16	17			
1785-	GRID	778		62	16	17			
1786-	GRID	779		62	16	17			
1787-	GRID	780		62	16	17			
1788-	GRID	781		62	16	17			
1789-	GRID	782		62	16	17			
1790-	GRID	783		62	16	17			
1791-	GRID	784		62	16	17			
1792-	GRID	785		62	16	17			
1793-	GRID	786		62	16	17			
1794-	GRID	787		62	16	17			
1795-	GRID	788		62	16	17			
1796-	GRID	789		62	16	17			
1797-	GRID	790		62	16	17			
1798-	GRID	791		62	16	17			
1799-	GRID	792		62	16	17			
1800-	GRID	792		62	16	17			

S O R T E D B U L K D A T A E C H O

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1901	GRID	893	23.875	16.22855	0.	2.25				
1902	GRID	894	23.875	16.22855	4.79					
1903	GRID	895	23.875	16.22855	5.23					
1904	GRID	896	23.875	16.22855	7.77					
1905	GRID	897	23.875	16.22855	10.02					
1906	GRID	898	23.875	15.5	0.					
1907	GRID	899	23.875	15.5	2.25					
1908	GRID	900	23.875	15.5	4.79					
1909	GRID	901	23.875	15.5	5.23					
1910	GRID	902	23.875	15.5	7.77					
1911	GRID	903	23.875	15.5	10.02					
1912	GRID	904	23.875	15.5	0.					
1913	GRID	905	27.77	29.67	0.					
1914	GRID	906	27.77	29.67	2.25					
1915	GRID	907	27.77	29.67	4.79					
1916	GRID	908	27.77	29.67	5.23					
1917	GRID	909	27.77	29.67	7.77					
1918	GRID	910	27.77	29.67	10.02					
1919	GRID	911	27.77	28.8855	0.					
1920	GRID	912	27.77	28.8855	2.25					
1921	GRID	913	27.77	28.8855	4.79					
1922	GRID	914	27.77	28.8855	5.23					
1923	GRID	915	27.77	28.8855	7.77					
1924	GRID	916	27.77	28.8855	10.02					
1925	GRID	917	27.77	27.7	0.					
1926	GRID	918	27.77	27.7	2.25					
1927	GRID	919	27.77	25.585	4.79					
1928	GRID	920	27.77	25.585	5.23					
1929	GRID	921	27.77	22.585	4.79					
1930	GRID	922	27.77	22.585	5.23					
1931	GRID	923	27.77	19.585	4.79					
1932	GRID	924	27.77	19.585	5.23					
1933	GRID	925	27.77	17.47	4.79					
1934	GRID	926	27.77	17.47	5.23					
1935	GRID	927	27.77	16.285	0.					
1936	GRID	928	27.77	16.285	2.25					
1937	GRID	929	27.77	16.285	4.79					
1938	GRID	930	27.77	16.285	5.23					
1939	GRID	931	27.77	16.285	7.77					
1940	GRID	932	27.77	16.22855	10.02					
1941	GRID	933	27.77	15.5	0.					
1942	GRID	934	27.77	15.5	2.25					
1943	GRID	935	27.77	15.5	4.79					
1944	GRID	936	27.77	15.5	5.23					
1945	GRID	937	27.77	15.5	7.77					
1946	GRID	938	27.77	15.5	10.02					
1947	GRID	939	32.7	29.67	0.					
1948	GRID	940	32.7	29.67	2.25					
1949	GRID	941	32.7	29.67	4.79					
1950	GRID	942	32.7	29.67	5.23					
1951	GRID	943	32.7	29.67	7.77					
1952	GRID	944	32.7	29.67	10.02					
1953	GRID	945	32.7	28.8855	0.					
1954	GRID	946	32.7	28.8855	2.25					
1955	GRID	947	32.7	28.8855	4.79					
1956	GRID	948	32.7	28.8855	5.23					
1957	GRID	949	32.7	28.8855	7.77					
1958	GRID	950	32.7	28.8855	10.02					
1959	GRID	951	32.7	25.585	0.					
1960	GRID	952	32.7	22.585	2.25					
1961	GRID	953	32.7	22.585	4.79					
1962	GRID	954	32.7	19.585	5.23					
1963	GRID	955	32.7	19.585	4.79					
1964	GRID	956	32.7	16.285	5.23					
1965	GRID	957	32.7	16.285	0.					
1966	GRID	958	32.7	16.285	2.25					
1967	GRID	959	32.7	16.285	4.79					
1968	GRID	960	32.7	16.285	5.23					
1969	GRID	961	32.7	16.22855	7.77					
1970	GRID	962	32.7	16.22855	10.02					
1971	GRID	963	32.7	15.5	0.					
1972	GRID	964	32.7	15.5	2.25					
1973	GRID	965	32.7	15.5	4.79					
1974	GRID	966	32.7	15.5	5.23					
1975	GRID	967	32.7	15.5	7.77					
1976	GRID	968	32.7	15.5	10.02					
1977	GRID	969	38.72	29.67	0.					
1978	GRID	970	38.72	29.67	2.25					
1979	GRID	971	38.72	29.67	4.79					
1980	GRID	972	38.72	29.67	5.23					
1981	GRID	973	38.72	29.67	7.77					
1982	GRID	974	38.72	29.67	10.02					
1983	GRID	975	38.72	28.8855	0.					
1984	GRID	976	38.72	28.8855	2.25					
1985	GRID	977	38.72	28.8855	4.79					
1986	GRID	978	38.72	28.8855	5.23					
1987	GRID	979	38.72	28.8855	7.77					
1988	GRID	980	38.72	28.8855	10.02					
1989	GRID	981	38.72	25.585	0.					
1990	GRID	982	38.72	22.585	2.25					
1991	GRID	983	38.72	22.585	4.79					
1992	GRID	984	38.72	19.585	5.23					
1993	GRID	985	38.72	19.585	4.79					
1994	GRID	986	38.72	16.285	5.23					
1995	GRID	987	38.72	16.285	0.					
1996	GRID	988	38.72	16.285	2.25					
1997	GRID	989	38.72	16.285	4.79					
1998	GRID	990	38.72	16.285	5.23					
1999	GRID	991	38.72	16.285	7.77					
2000	GRID	992	38.72	16.285	10.02					

S O R T E D B U L K D A T A E C H O

CARD	1	2	3	4	5	6	7	8	9	10
2001-	GRID	993		38.72	15.5	0.				
2002-	GRID	994		38.72	15.5	2.25				
2003-	GRID	995		38.72	15.5	4.79				
2004-	GRID	996		38.72	15.5	5.23				
2005-	GRID	997		38.72	15.5	7.77				
2006-	GRID	998		38.72	15.5	10.02				
2007-	GRID	999		47.93	29.67	0.				
2008-	GRID	1000		47.93	29.67	2.25				
2009-	GRID	1001		47.93	29.67	4.79				
2010-	GRID	1002		47.93	29.67	5.23				
2011-	GRID	1003		47.93	29.67	7.77				
2012-	GRID	1004		47.93	29.67	10.02				
2013-	GRID	1005		47.93	28.885	0.				
2014-	GRID	1006		47.93	28.885	2.25				
2015-	GRID	1007		47.93	28.885	4.79				
2016-	GRID	1008		47.93	28.885	5.23				
2017-	GRID	1009		47.93	28.885	7.77				
2018-	GRID	1010		47.93	28.885	10.02				
2019-	GRID	1011		47.93	25.585	4.79				
2020-	GRID	1012		47.93	25.585	5.23				
2021-	GRID	1013		47.93	22.285	4.79				
2022-	GRID	1014		47.93	22.285	5.23				
2023-	GRID	1015		47.93	19.585	4.79				
2024-	GRID	1016		47.93	19.585	5.23				
2025-	GRID	1017		47.93	16.285	0.				
2026-	GRID	1018		47.93	16.285	2.25				
2027-	GRID	1019		47.93	16.285	4.79				
2028-	GRID	1020		47.93	16.285	5.23				
2029-	GRID	1021		47.93	16.285	7.77				
2030-	GRID	1022		47.93	16.285	10.02				
2031-	GRID	1023		47.93	15.5	0.			23456	
2032-	GRID	1024		47.93	15.5	2.25			23456	
2033-	GRID	1025		47.93	15.5	4.79			23456	
2034-	GRID	1026		47.93	15.5	5.23			23456	
2035-	GRID	1027		47.93	15.5	7.77			23456	
2036-	GRID	1028		47.93	15.5	10.02			23456	
2037-	GRID	1029		48.332	29.67	0.				
2038-	GRID	1030		48.332	29.67	2.25				
2039-	GRID	1031		48.332	29.67	4.79				
2040-	GRID	1032		48.332	29.67	5.23				
2041-	GRID	1033		48.332	29.67	7.77				
2042-	GRID	1034		48.332	29.67	10.02				
2043-	GRID	1035		48.332	28.885	0.				
2044-	GRID	1036		48.332	28.885	2.25				
2045-	GRID	1037		48.332	28.885	4.79				
2046-	GRID	1038		48.332	28.885	5.23				
2047-	GRID	1039		48.332	28.885	7.77				
2048-	GRID	1040		48.332	28.885	10.02				
2049-	GRID	1041		48.332	25.585	4.79				
2050-	GRID	1042		48.332	25.585	5.23				
2051-	GRID	1043		48.332	22.285	4.79				
2052-	GRID	1044		48.332	22.285	5.23				
2053-	GRID	1045		48.332	19.585	4.79				
2054-	GRID	1046		48.332	19.585	5.23				
2055-	GRID	1047		48.332	16.285	0.				
2056-	GRID	1048		48.332	16.285	2.25				
2057-	GRID	1049		48.332	16.285	4.79				
2058-	GRID	1050		48.332	16.285	5.23				
2059-	GRID	1051		48.332	16.285	7.77				
2060-	GRID	1052		48.332	16.285	10.02				
2061-	GRID	1053		48.332	15.5	0.			23456	
2062-	GRID	1054		48.332	15.5	2.25			23456	
2063-	GRID	1055		48.332	15.5	4.79			23456	
2064-	GRID	1056		48.332	15.5	5.23			23456	
2065-	GRID	1057		48.332	15.5	7.77			23456	
2066-	GRID	1058		48.332	15.5	10.02			23456	
2067-	GRID	1059		49.11	29.67	0.				
2068-	GRID	1060		49.11	29.67	2.25				
2069-	GRID	1061		49.11	29.67	4.79				
2070-	GRID	1062		49.11	29.67	5.23				
2071-	GRID	1063		49.11	29.67	7.77				
2072-	GRID	1064		49.11	29.67	10.02				
2073-	GRID	1065		49.11	28.885	0.				
2074-	GRID	1066		49.11	28.885	2.25				
2075-	GRID	1067		49.11	28.885	4.79				
2076-	GRID	1068		49.11	28.885	5.23				
2077-	GRID	1069		49.11	28.885	7.77				
2078-	GRID	1070		49.11	28.885	10.02				
2079-	GRID	1071		49.11	25.585	4.79				
2080-	GRID	1072		49.11	25.585	5.23				
2081-	GRID	1073		49.11	22.285	4.79				
2082-	GRID	1074		49.11	22.285	5.23				
2083-	GRID	1075		49.11	19.585	4.79				
2084-	GRID	1076		49.11	19.585	5.23				
2085-	GRID	1077		49.11	16.285	0.				
2086-	GRID	1078		49.11	16.285	2.25				
2087-	GRID	1079		49.11	16.285	4.79				
2088-	GRID	1080		49.11	16.285	5.23				
2089-	GRID	1081		49.11	16.285	7.77				
2090-	GRID	1082		49.11	16.285	10.02				
2091-	GRID	1083		49.11	15.5	0.				
2092-	GRID	1084		49.11	15.5	2.25				
2093-	GRID	1085		49.11	15.5	4.79				
2094-	GRID	1086		49.11	15.5	5.23				
2095-	GRID	1087		49.11	15.5	7.77				
2096-	GRID	1088		49.11	15.5	10.02				
2097-	HAT1	29								
2098-	HAT1	49	2.957+4							
2099-	HAT1	19	7640.							
2100-	PSOLID	9	49	.7854	0.04909	0.04909	.09817			
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TOTAL COUNT= 2101