NASA Contractor Report 170392

NASA-CR-170392-VOL-3
19830005838

NASTRAN MODEL OF A LARGE FLEXIBLE SWING-WING BOMBER

Volume III: NASTRAN Model Development—Wing Structure

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September 1982

National Aeronautics and
Space Administration

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Volume III: NASTRAN Model Development—Wing Structure

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Los Angeles, California

Prepared for Dryden Flight Research Facility
under Contract NAS4-2432

National Aeronautics and
Space Administration

1982

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

LIST OF TABLES

NASTRAN MODEL OF A LARGE FLEXIBLE SWING-WING BOMBER

Volume III: NASTRAN Model Development—Wing Structure

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SUMMARY

This report describes the development and validation of the NASTRAN model of the B-1 aircraft 2 (A/C-2) structure. This NASTRAN model substructure will be utilized as part of the total aircraft structural model. Subsequently, the remaining structural components will be modeled for the assembly of the total aircraft NASTRAN model. The intent is to utilize the NASTRAN model computed stiffness matrix in conjunction with the FLEXSTAB program for aeroelastic analysis. The application of these advanced programs on a large, flexible aircraft that has accumulated flight data will add to the technology base for future transport aircraft.

During this contract phase, the NASTRAN model plan for the wing structure was expanded in detail to generate the NASTRAN model for this substructure. The grid point coordinates were coded for each element. The material properties and sizing data for each element were specified.

The wing substructure model was thoroughly checked out for continuity, connectivity, and constraints. This substructure was processed for structural influence coefficients (SIC) point loadings and the deflections were compared to those computed for the aircraft detail model. Finally, a demonstration and validation processing of this substructure was accomplished using the NASTRAN finite element program installed at the NASA/DFRC facility. The bulk data deck, stiffness matrices, and SIC output data were delivered to NASA DFRC.

INTRODUCTION

A/C-2 (shown in figure 1) is being employed in the airloads survey flight test program. This aircraft has undergone extensive ground testing to calibrate

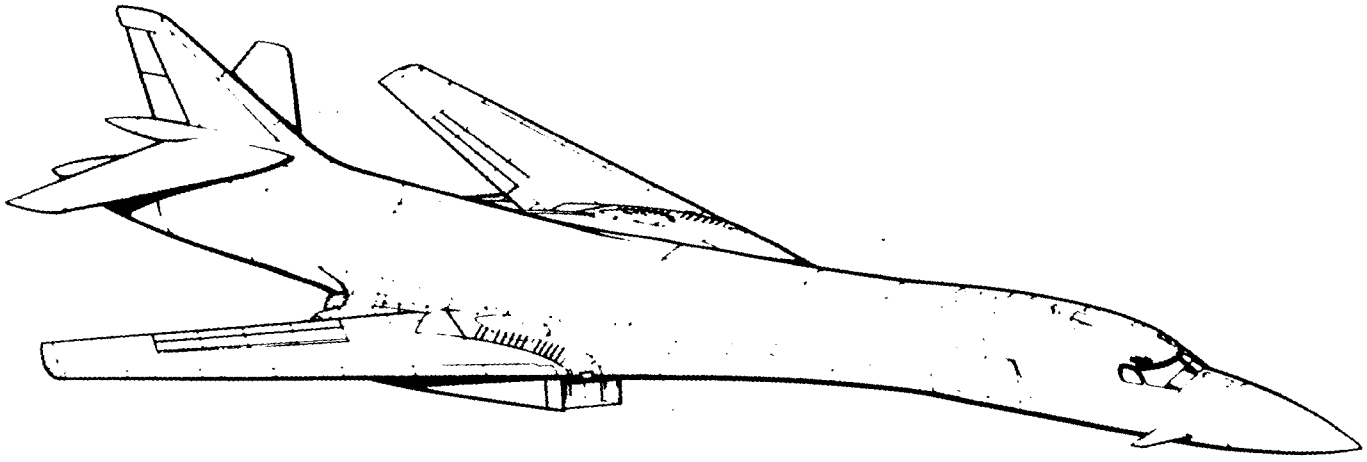


Figure 1. - B-1 aircraft.

the strain gages utilized in the airloads survey. The aircraft provides a reasonable simulation of a future transport aircraft since it employs the large flexible structure (figure 2) envisioned in future transport designs.

The airloads data gathered during the flight test program can be utilized in the evaluation of NASA computer programs recently developed to enhance the analytical techniques of predicting aeroelastic response of large, flexible aircraft. These analytical techniques include computerized structural analysis programs such as NASTRAN and FLEXSTAB.

Since the B-1 development program involves all experimental tests needed to correlate the analytical predictions with actual measured results, detailed plans for constructing a NASTRAN structural model of the B-1 airframe, suitable for use on the NASA/DFRC Cyber computer, were initiated. This model is of minimum complexity to give satisfactory flexibility characteristics for the FLEXSTAB aeroelastic analysis. Included in this model are the control surfaces, the control system stiffness, and the secondary leading edge and trailing edge structure. During this contract phase, the detailed plans for constructing a NASTRAN structure model for the wing substructure was implemented. The plans were expanded in detail to generate the NASTRAN model for the wing structure. Grid point coordinates for this substructure were coded for each element, and the material properties and sizing data were specified. The bulk data were thoroughly checked using interactive graphics techniques. The data were evaluated for continuity, connectivity, and constraints. In addition, the SIC point loadings were applied to compute the deflections which were compared with the aircraft-computed deflections. A demonstration and validation processing of these NASTRAN model substructures were accomplished using the NASTRAN finite element program installed on the NASA/DFRC Cyber computer.

AIRCRAFT DESCRIPTION

The B-1 aircraft is a prototype long-range supersonic bomber with the capability of high-speed flight at low altitude. Configuration dimensions and general arrangement are presented in figure A-1. The aircraft utilizes a blended wing-body concept with variable-sweep wings, a single vertical stabilizer with a three-section (upper, intermediate, and lower) rudder, and horizontal stabilizers which operate independently to provide both pitch and roll control. The variable-sweep (15 to 67.5 degrees) wing, equipped with slats, spoilers (which also function as speed brakes), and flaps, provides the aircraft with a highly versatile operating envelope. Canted vanes, mounted on each side of the forward fuselage, are part of the structural modal control system which reduces structural bending oscillations in the vertical and lateral axes.

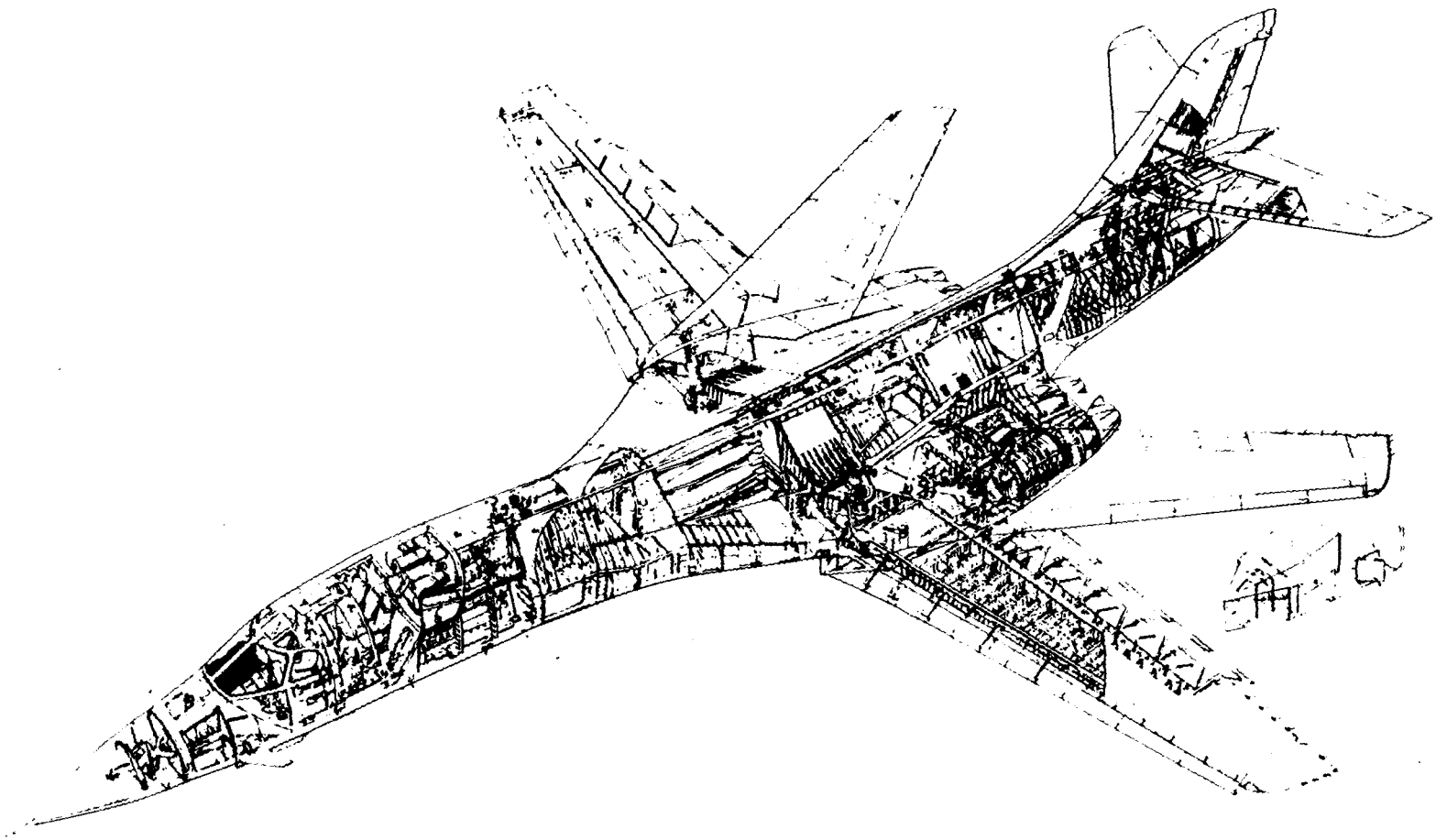


Figure 2. - Structural breakdown.

The aircraft is powered by four YF1-1-GE-100 dual-rotor augmented turbofan engines in the 30,000-pound-thrust class. The engines are mounted in twin nacelles below the wing, approximately at the left and ring wing pivot points. For supersonic speeds, an air induction control system varies the internal geometry of the nacelle inlet ducts to maintain the required airflow to the engines for all flight conditions.

Wing

The wing consists of the wing pivot, outer wing panel, flaps, slats, and spoilers (figure A-2). The wing pivot consists of the pin, bearings, and inboard and outboard lugs, with provisions for attachment to the wing carry-through fuselage section and the wing outer panel.

The wing outer panel consists of a structural box with leading edge slats, trailing edge flaps, and spoilers over the flap leading edge. The wing is mounted on pivot bearings whose supporting lugs are mechanically attached to the wing covers. Provisions for integral fuel containment is provided in the outboard wing structural box. Access is provided for sealing, inspection, servicing, and replacement of fuel system components. Control surfaces on the wing include flaps, slats, and spoilers.

The flaps are aft of the wing rear spar and are mounted on rollers between curved tracks. Flap actuating jackscrews are in the mid bay of the flap panels. Segmented leading edge slats are provided. Each segment is supported on tracks mounted on rollers attached to the fixed leading edge structure. Segmented wing spoilers are aft of the wing rear spar and above the flaps.

NASTRAN MODELS

The detailed plans for the finite element modeling of the A/C-2 structure intended for use with the NASA/COSMIC release of NASTRAN level 16.0 on the NASA/DFRC Cyber computer constrains the model to the minimum complexity to give satisfactory flexibility characteristics for FLEXSTAB aeroelastic analysis.

The NASTRAN model plans specify seven substructures consisting of the following:

(1) Horizontal stabilizer; leading edge, and trailing edge

(2) Vertical stabilizer; leading edge, and rudders

(3) Nacelle structure

(4) Wing outer panel, flaps, slats, and outboard transition ribs

(5) Forward fuselage structure

(6) Aft fuselage structure, wing carry-through structure (WCTS), and inboard transition lugs

(7) Overwing and underwing fairings

In addition to modeling the A/C-2 airframe structure to represent the flexibility characteristics, the model was designed to provide stress data at the airload survey strain gage locations for each component. In these regions, the model complexity was increased to provide the desired accuracy. In some regions, the complexity was dictated by the NASTRAN aspect ratio constraints. During this contract phase, the NASTRAN model plans for the wing structure were implemented to generate the NASTRAN model for this substructure. The description of this model, which was demonstrated and validated on the NASA/DFRC Cyber computer system, is presented in this report.

Wing NASTRAN Model

The NASTRAN model of the outer wing panel and outboard lug is configured to be representative of the A/C-2 wing structure. The upper and lower outer wing cover skins are defined using membrane elements. The spars and ribs are represented by rods and shear panels. Bar elements are utilized where the skin cover nodes require stabilization for loading applied normal to the surface. Each slat and flap segment was modeled with nodes separate from the main wing box. This will facilitate slat or flap extension of these model elements. The slats and flaps sections are tied to the main wing box using scalar spring elements to simulate the actuator stiffnesses.

The tracks are modeled with axial rods and shear panels at the edge of each slat and flap segment.

The spoilers are modeled in their closed position by representative membrane panels between the rear spar and the flap segments of the upper cover skin.

The outboard lugs and transition region are defined by plates elements. Rods are used to simulate the pivot pin stiffness, for positive Z loading, during this modeling phase. A summary of the NASTRAN elements used in the assembly of the wing substructure is presented in table I.

TABLE I. - ARS NASTRAN MODEL STATISTICS

Description of substructure	NASTRAN model elements						
	No. of grids	Rods	Bars	Shear panels	Membranes	Plates	Scalar Springs
Wing	991	1351	46	439	702	170	141

Element	NASTRAN nomenclature
Rod	= CONROD
Bar	= CBAR
Shear panel	= CSHEAR
Membrane	= CQDMEM2 and CTRMEM
Plate	= CQUAD1 and CTRIA1
Scalar spring	= CELAS1 (actuator and track stiffnesses)

The material properties referenced by the wing finite elements represents aluminum outboard of the wing transition and titanium for the transition and outboard lug structure.

The NASTRAN model diagrams for the wing substructure are presented in figures C-1 through C-56. The node and element numbers are shown on these diagrams. The model complexity has been increased at the airloads survey strain gage locations to provide stress recovery data. These strain gages are indicated on the nodal diagrams.

The NASTRAN bulk data identifying the coordinates and element sizing are presented on pages 110 through 195. A description of these bulk data is presented on pages 17 through 36 for each element-type utilized.

The Airloads Research Study NASTRAN model was thoroughly checked out for continuity, connectivity, and constraints, using interactive graphics techniques. This model was then processed for the loading applied at each structural influence coefficient point (table C-1 and figure C-57) with the model constrained at

the center of the upper and lower outboard lug and the wing sweep moment reacted by the sweep actuator. The deflections computed for these SIC loadings were compared with those computed for the B-1 wing detailed finite element model with identical constraints.

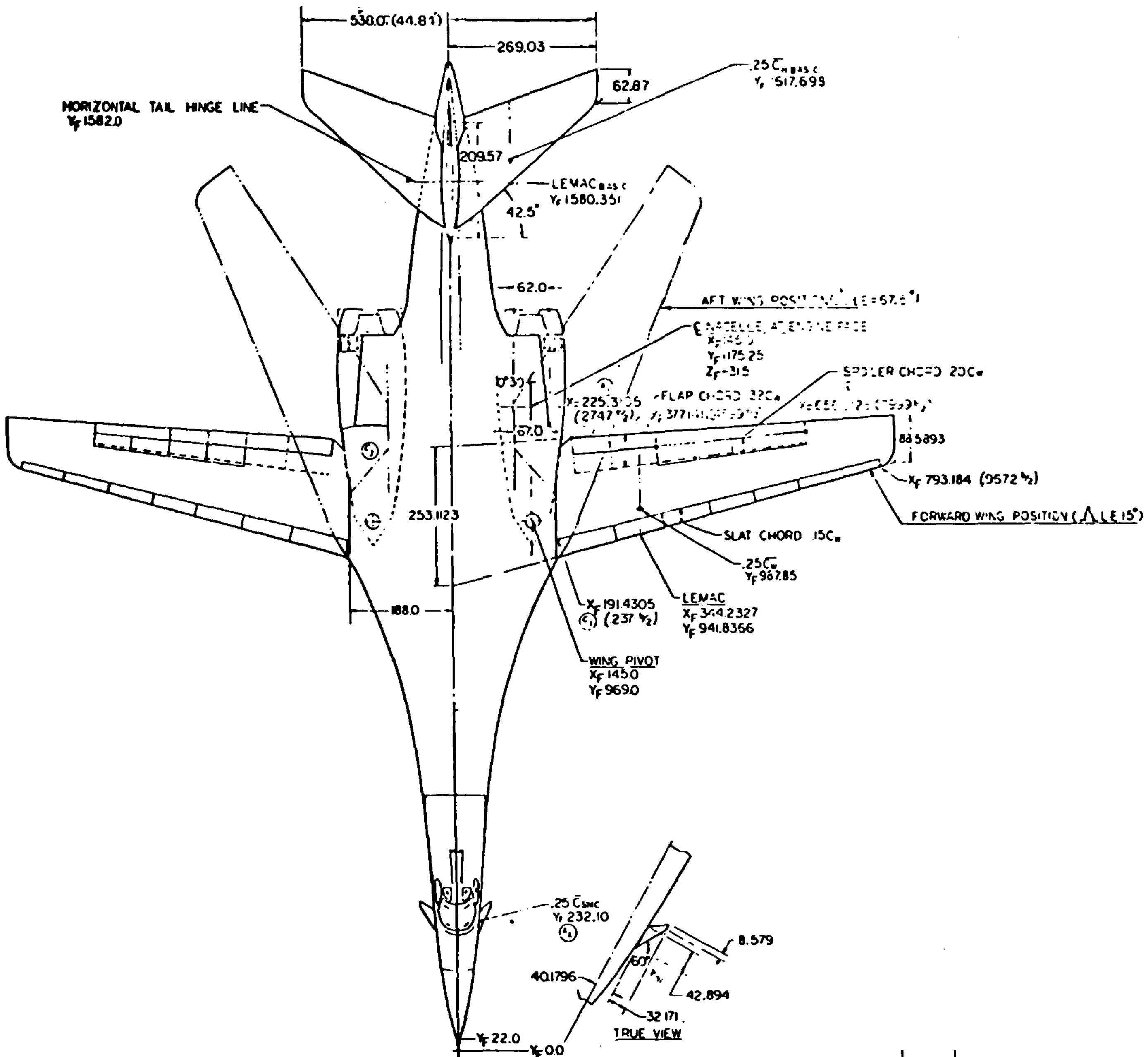
The comparison of the deflections along the approximate wing shear center is shown in figure C-58. Model deflections are compared to SIC deflections at points 39, 45, 51, 57, 63, 69, 75, and 83 for unit loads applied at these same points. Figure C-59 compares the deflections along the streamline direction for SIC loads at points 55, 56, 57, 58, 59, and 60 for a load applied at SIC point 60. Figure C-60 compares the NASTRAN model deflection along the flaps X-direction to the SIC deflections at points 42, 48, 54, 60, 66, and 72.

BULK DATA

The NASTRAN model coordinates, sizing, material properties, and loading data are presented in the NASTRAN program input format. Since these data are identified by column numbers for each element type, excerpts of the NASTRAN User's Manual are included. The format of the sorted bulk data for each element type is presented on pages 17 through 36. This format is applicable to the NASTRAN model bulk data presented on pages 110 through 195 of this report.

Appendix A

FIGURES USING ENGINEERING UNITS



GEOMETRIC DATA

ITEM	WING FWD POSITION	WING AFT POSITION	HORIZONTAL TAIL TOTAL	VERTICAL TAIL TOTAL	STRUCTURAL MODE CONTROL
AREA ~ SQ. FT.	1946.0	1946 (REF)	509.0	247.4	11.5
ASPECT RATIO	9.6	3.14	3.95	1.2	2.5
TAPER RATIO	.35	—	.30	.30	.20
THICKNESS RATIO	REF: LINES DRAWING NA69-1902 DB-2		REF: MOID 2.14	[illegible]	.05
AIRFOIL SECTION				[illegible]	65A005
LEADING EDGE SWEEP	16.0°	67.5°	42.5°	45° AT .25C	60°
DIHEDRAL ANGLE	-1.94°	—	0°	—	-30.0°
INCIDENCE ANGLE	[illegible]	—	0°	—	DEFL ± 20.0°
MAC LENGTH-INCHES	184.053	—	149.385	188.954	29.55
MAC LOCATION	344.2327	—	110.373	84.825	12.510 TRUE

CONTROL SURFACE DATA

ITEM	FLAP	SPOILER	SLAT	RUDDER	HORIZ TAIL
TYPE	SINGLE-SLOTTED	UPPER SURFACE ONLY	POWERED	—	ALL MOVABLE
AREA - SQ FEET	310.38	115.0	187.62	60.6	474.5
DEFLECTION	25°	0° TO 70° UP	20.0°	[illegible]	[illegible]

LANDING GEAR DATA

ITEM	MAIN	AUXILIARY
TIRE SIZE & TYPE	C44.5x16.0-21 TWIN TANDEM	35x11.5-16 TWIN
PLY RATING	24	24
ROLLING RADIUS - INCHES	18.4	14.79
FLAT RADIUS - INCHES	13.6	11.3
STRUT - TOTAL STROKE - IN	16.5	22.0
STRUT - STATIC TO COMPRESSED	3.5	7.0

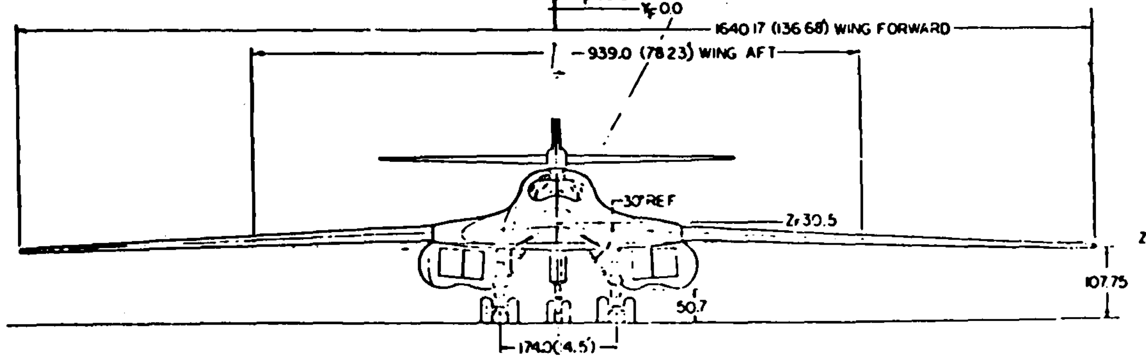
PROPULSION DATA

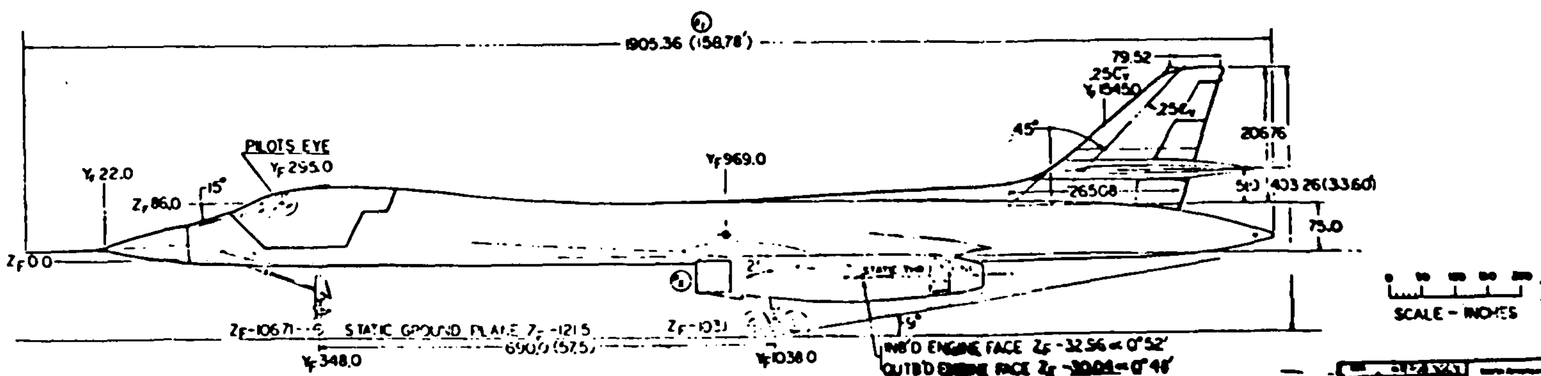
FOUR 100% SIZE GENERAL ELECTRIC YF101 - GE - 100 ENGINES

2-D VARIABLE RAMP INLETS-CAPTURE AREA = 1441 SQ IN PER ENGINE

WEIGHT DATA

AIRCRAFT EMPTY WEIGHT	~ LB =	SEE SDM CODE II B-7
DESIGN USEFUL LOAD	~ LB =	SEE SDM CODE II B-7
DESIGN GROSS WEIGHT-TAXI	~ LB =	360,000
MAXIMUM GROSS WEIGHT	~ LB =	391,000





GENERAL ARRANGEMENT THREE VIEW RDT&E A/V NO 1 & 2

Figure A-1. - General arrangement - RDT&E A/C-1 and -2.

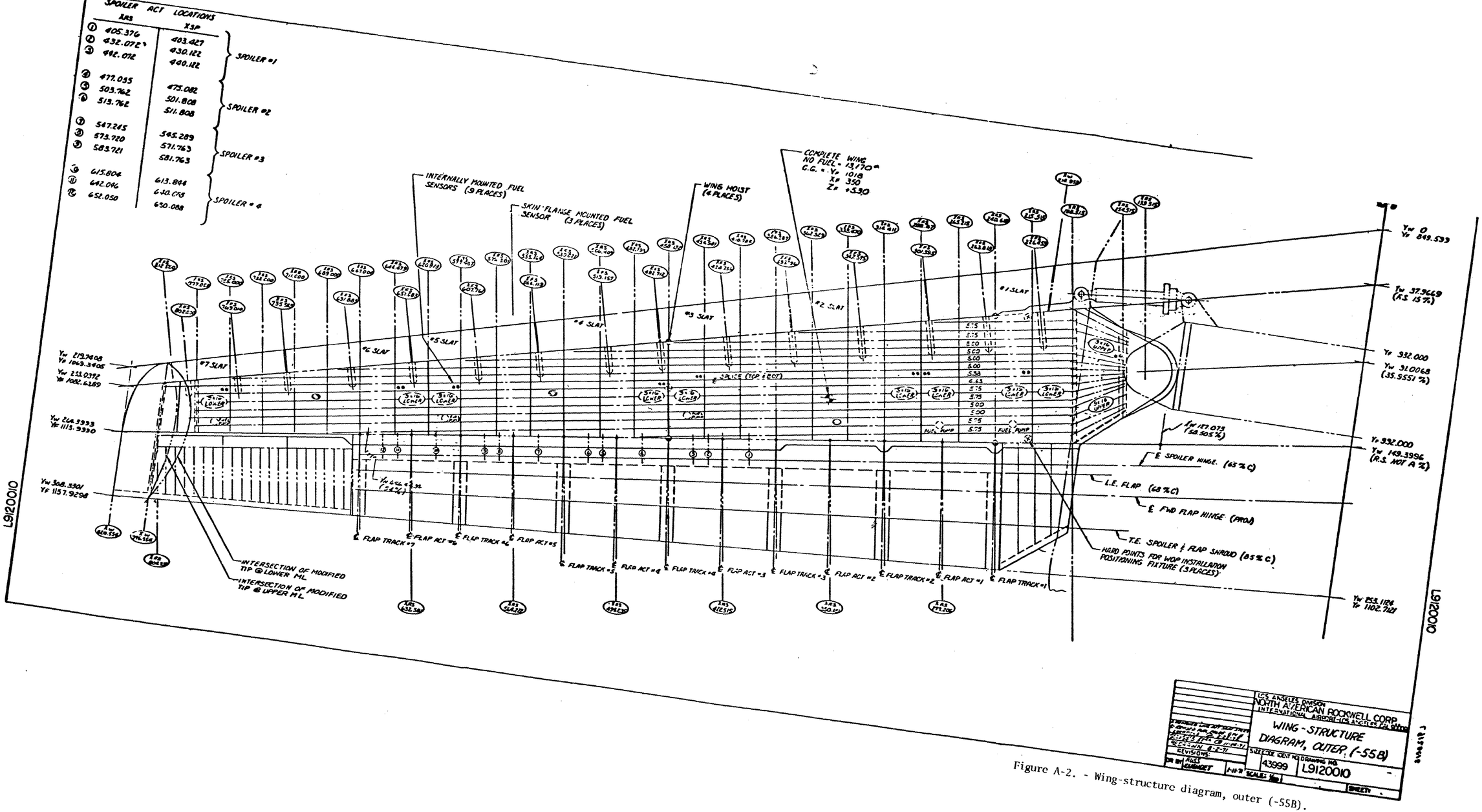


Figure A-2. - Wing-structure diagram, outer (-55B).

Appendix B

NASTRAN MODEL BULK DATA FORMAT

Input Data Card CBAR Simple Beam Element Connection

Description: Defines a simple beam element (BAR) of the structural model.

Format and Example:

1	2	3	4	5	6	7	8	9	10
CBAR	EID	PID	GA	GB	X1,GO	X2	X3	F	abc
CBAR	2	39	7	3	13			2	123
+bc	PA	PB	Z1A	Z2A	Z3A	Z1B	Z2B	Z3B	
+23		513							

Field	Contents
EID	Unique element identification number (Integer > 0)
PID	Identification number of a PBAR property card (Default is EID unless BARØR card has nonzero entry in field 3) (Integer > 0 or blank*)
GA,GB	Grid point identification numbers of connection points (Integer > 0; GA ≠ GB)
X1,X2,X3	Components of vector $\vec{v}$, at end a, (figure 1(a) on page 1.3-15) measured at end a, parallel to the components of the displacement coordinate system for GA, to determine (with the vector from end a to end b) the orientation of the element coordinate system for the bar element (Real, $X1^2 + X2^2 + X3^2 > 0$ or blank*, see below).
GO	Grid point identification number to optionally supply X1, X2, X3 (integer > 0 or blank*) (see below)
F	Flag to specify the nature of fields 6-8 as follows:

	6	7	8
F = blank*			
F = 1	X1	X2	X3
F = 2	GO	blank/0	blank/0

PA,PB	Pin flags for bar ends a and b, respectively, that are used to insure that the bar cannot resist a force or moment corresponding to the pin flag at that respective end of the bar. (Up to 5 of the unique digits 1-6 anywhere in the field with no imbedded blanks; integer > 0) (These degree of freedom codes refer to the element forces and not global forces. The bar must have stiffness associated with the pin flag. For example, if pin flag 4 is specified, the bar must have a value for J, the torsional constant.)
Z1A,Z2A,Z3A Z1B,Z2B,Z3B	Components of offset vectors $\vec{w}_a$ and $\vec{w}_b$, respectively, (see figure 1(a), page 1.3-15) in displacement coordinate systems at points GA and GB, respectively. (Real or blank)

Remarks: 1. Element identification numbers must be unique with respect to all other element identification numbers.

2. For an explanation of bar element geometry, see Section 1.3.2.

3. Zero (0) must be used in fields 7 and 8 in order to override entries in these fields associated with F = 1 in field 9 on a BARØR card.

4. If there are no pin flags or offsets, the continuation card may be omitted.

Input Data Card CELAS1 Scalar Spring Connection

Description: Defines a scalar spring element of the structural model.

Format and Example:

1	2	3	4	5	6	7	8	9	10
CELAS1	EID	PID	G1	C1	G2	C2			
CELAS1	2	6			8	1			

Field	Contents
EID	Unique element identification number (Integer > 0)
PID	Identification number of a PELAS property card (Default is EID) (Integer > 0)
G1,-G2	Geometric grid point identification number (Integer > 0)
C1, C2	Component number (6 ≥ Integer ≥ 0)

Remarks:

1. Scalar points may be used for G1 and/or G2 in which case the corresponding C1 and/or C2 must be zero or blank. Zero or blank may be used to indicate a grounded* terminal G1 or G2 with a corresponding blank or zero C1 or C2. If only scalar points and/or ground are involved, it is more efficient to use the CELAS3 card.
2. Element identification numbers must be unique with respect to all other element identification numbers.
3. The two connection points, (G1, C1) and (G2, C2), must be distinct.
4. For a discussion of the scalar elements, see Section 5.6 of the Theoretical Manual.

* A grounded terminal is a scalar point or coordinate of a geometric grid point whose displacement is constrained to zero.

Input Data Card CØNRØD Rod Element Property and Connection

Description: Defines a rod element of the structural model without reference to a property card.

Format and Example:

1	2	3	4	5	6	7	8	9	10
CØNRØD	EID	G1	G2	MID	A	J	C	NSM	
CØNRØD	2	16	17	23	2.69				

Field	Contents
EID	Unique element identification number (Integer > 0)
G1, G2	Grid point identification numbers of connection points (Integer > 0; G1 ≠ G2)
MID	Material identification number (Integer > 0)
A	Area of rod (Real)
J	Torsional constant (Real)
C	Coefficient for torsional stress determination (Real)
NSM	Nonstructural mass per unit length (Real)

Remarks:
1. Element identification numbers must be unique with respect to all other element identification numbers.
2. For structural problems, CØNRØD cards may only reference MAT1 material cards.
3. For heat transfer problems, CØNRØD cards may only reference MAT4 or MAT5 material cards.

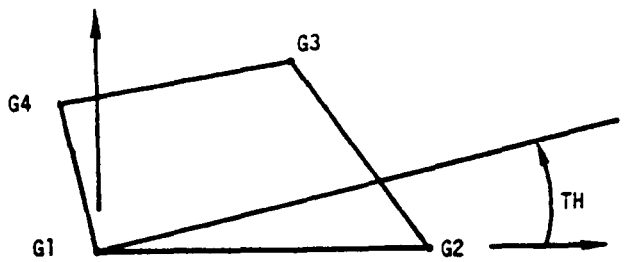
Input Data Card CQDMEM2 Quadrilateral Element Connection

Description: Defines a quadrilateral membrane element (QDMEM2) of the structural model consisting of four nonoverlapping TRMEM elements.

Format and Example:

1	2	3	4	5	6	7	8	9	10
CQDMEM2	EID	PID	G1	G2	G3	G4	TH		
CQDMEM2	72	13	13	14	15	16	29.2		

Field	Contents
EID	Element identification number (Integer > 0)
PID	Identification number of a PQDMEM2 property card (Default is EID) (Integer > 0)
G1,G2,G3,G4	Grid point identification numbers of connection points (Integer > 0; G1 ≠ G2 ≠ G3 ≠ G4)
TH	Material property orientation angle in degrees (Real) The sketch below gives the sign convention for TH



Remarks:
1. Element identification numbers must be unique with respect to all other element identification numbers.
2. Grid points G1 through G4 must be ordered consecutively around the perimeter of the element.
3. All interior angles must be less than 180 degrees.

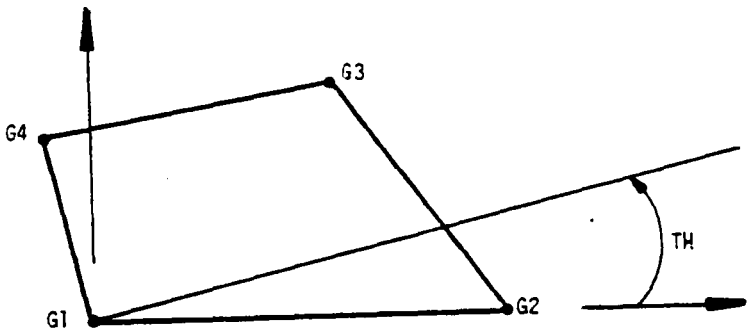
Input Data Card CQUAD1 Quadrilateral Element Connection

Description: Defines a quadrilateral membrane and bending element (QUAD1) of the structural model.

Format and Example:

1	2	3	4	5	6	7	8	9	10
CQUAD1	EID	PID	G1	G2	G3	G4	TH		
CQUAD1	72	13	13	14	15	16	29.2		

Field	Contents
EID	Element identification number (Integer > 0)
PID	Identification number of a PQUAD1 property card (Default is EID) (Integer > 0)
G1,G2,G3,G4	Grid point identification numbers of connection points (Integer > 0; G1 ≠ G2 ≠ G3 ≠ G4)
TH	Material property orientation angle in degrees (Real) The sketch below gives the sign convention for TH.



Remarks:
1. Element identification numbers must be unique with respect to all other element identification numbers.
2. Grid points G1 thru G4 must be ordered consecutively around the perimeter of the element.
3. All interior angles must be less than 180°.

Input Data Card CSHEAR Shear Panel Element Connection

Description: Defines a shear panel element (SHEAR) of the structural model.

Format and Example:

1	2	3	4	5	6	7	8	9	10
CSHEAR	EID	PID	G1	G2	G3	G4			
CSHEAR	3	6	1	5	3	7			

Field	Contents
EID	Element identification number (Integer > 0)
PID	Identification number of a PSHEAR property card (Default is EID) (Integer > 0)
G1, G2, G3, G4	Grid point identification numbers of connection points (Integer > 0; G1 ≠ G2 ≠ G3 ≠ G4)

Remarks:
1. Element identification numbers must be unique with respect to all other element identification numbers.
2. Grid points G1 thru G4 must be ordered consecutively around the perimeter of the element.
3. All interior angles must be less than 180°.

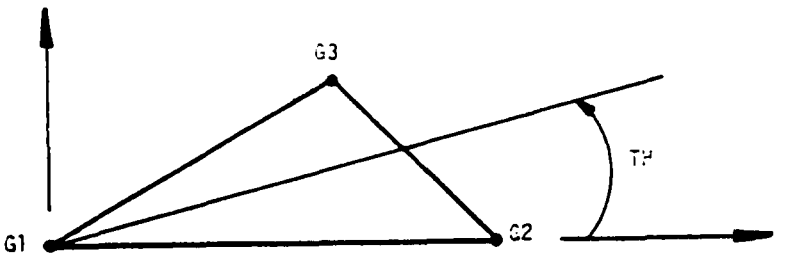
Input Data Card CTRMEM Triangular Element Connection

Description: Defines a triangular membrane element (TRMEM) of the structural model.

Format and Example:

1	2	3	4	5	6	7	8	9	10
CTRMEM	EID	PID	G1	G2	G3	TH			
CTRMEM	16	2	12	1	3	16.3			

Field	Contents
EID	Element identification number (Integer > 0)
PID	Identification number of a PTRMEM property card (Default is EID) (Integer > 0)
G1,G2,G3	Grid point identification numbers of connection points (Integer > 0; G1 ≠ G2 ≠ G3)
TH	Material property orientation angle in degrees (Real) - The sketch below gives the sign convention for TH.



Remarks: 1. Element identification numbers must be unique with respect to all other element identification numbers.

2. Interior angles must be less than 180°.

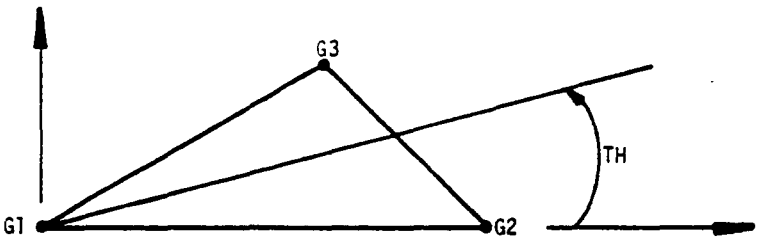
Input Data Card CTRIA1 Triangular Element Connection

Description: Defines a triangular membrane and bending element (TRIA1) of the structural model.

Format and Example:

1	2	3	4	5	6	7	8	9	10
CTRIA1	EID	PID	G1	G2	G3	TH			
CTRIA1	16	2	12	1	3	16.2			

Field	Contents
EID	Element identification number (Integer > 0)
PID	Identification number of a PTRIA1 property card (Default is EID) (Integer > 0)
G1,G2,G3	Grid point identification numbers of connection points (Integer > 0; G1 ≠ G2 ≠ G3)
TH	Material property orientation angle in degrees (Real) - The sketch below gives the sign convention for TH.



Remarks: 1. Element identification numbers must be unique with respect to all other element identification numbers.

2. Interior angles must be less than 180°.

Input Data Card FØRCE Static Load

Description: Defines a static load at a grid point by specifying a vector.

Format and Example:

1	2	3	4	5	6	7	8	9	10
FØRCE	SID	G	CID	F	N1	N2	N3		
FØRCE	2	5	6	2.9	0.0	1.0	0.0		

Field	Contents
SID	Load set identification number (Integer > 0)
G	Grid point identification number (Integer > 0)
CID	Coordinate system identification number (Integer ≥ 0)
F	Scale factor (Real)
N1,N2,N3	Components of Vector measured in coordinate system defined by CID (Real; $N1^2 + N2^2 + N3^2 > 0.0$)

Remarks: 1. The static load applied to grid point G is given by

$$\vec{f} = F\,\vec{N}$$

where $\vec{N}$ is the vector defined in fields 6, 7 and 8.

2. Load sets must be selected in the Case Control Deck (LOAD=SID) to be used by NASTRAN.

3. A CID of zero references the basic coordinate system.

Input Data Card GRAV Gravity Vector

Description: Used to define gravity vectors for use in determining gravity loading for the structural model.

Format and Example:

1	2	3	4	5	6	7	8	9	10
GRAV	SID	CID	G	N1	N2	N3			
GRAV	1	3	32.2	0.0	0.0	-1.0			

Field	Contents
SID	Set identification number (Integer > 0)
CID	Coordinate system identification number (Integer ≥ 0)
G	Gravity vector scale factor (Real)
N1, N2, N3	Gravity vector components (Real; $N1^2 + N2^2 + N3^2 > 0.0$)

Remarks: 1. The gravity vector is defined by

$$\vec{g} = G \cdot (N1, N2, N3).$$

2. A CID of zero references the basic coordinate system.
3. Gravity loads may be combined with "simple loads" (e.g., FØRCE, MØMENT) only by specification on a LØAD card. That is, the SID on a GRAV card may not be the same as that on a simple load card.
4. Load sets must be selected in the Case Control Deck (LØAD=SID) to be used by NASTRAN.

Input Data Card GRID Grid Point

Description: Defines the location of a geometric grid point of the structural model, the directions of its displacement, and its permanent single-point constraints.

Format and Example:

1	2	3	4	5	6	7	8	9	10
GRID	ID	CP	X1	X2	X3	CD	PS		
GRID	2	3	1.0	2.0	3.0		316		

Field	Contents
ID	Grid point identification number (0<Integer<999999)
CP	Identification number of coordinate system in which the location of the grid point is defined (Integer ≥ 0 or blank*).
X1,X2,X3	Location of the grid point in coordinate system CP (Real)
CD	Identification number of coordinate system in which displacements, degrees of freedom, constraints, and solution vectors are defined at the grid point (Integer ≥ 0 or blank*)
PS	Permanent single-point constraints associated with grid point (any of the digits 1-6 with no imbedded blanks) (Integer ≥ 0 or blank*)

Remarks: 1. All grid point identification numbers must be unique with respect to all other structural, scalar, and fluid points.

2. The meaning of X1, X2 and X3 depend on the type of coordinate system, CP, as follows: (see CØRD__ card descriptions)

Type	X1	X2	X3
Rectangular	X	Y	Z
Cylindrical	R	Θ(degrees)	Z
Spherical	R	Θ(degrees)	Φ(degrees)

3. The collection of all CD coordinate systems defined on all GRID cards is called the Global Coordinate System. All degrees-of-freedom, constraints, and solution vectors are expressed in the Global Coordinate System.

* See the GRDSET card for default options for fields 3, 7 and 8.

Input Data Card MAT1 Material Property Definition

Description: Defines the material properties for linear, temperature-independent, isotropic materials.

Format and Example:

1	2	3	4	5	6	7	8	9	10
MAT1	MID	E	G	NU	RHØ	A	TREF	GE	+abc
MAT1	17	3.+7	1.9+7		4.28	0.19	5.37+2	0.23	ABC
+abc	ST	SC	SS						
+BC	20.+4	15.+4	12.+4						

Field	Contents
MID	Material identification number (Integer > 0)
E	Young's modulus (Real $\geq$ 0.0 or blank)
G	Shear modulus (Real $\geq$ 0.0 or blank)
NU	Poisson's ratio (-1.0 < Real $\leq$ 0.5 or blank)
RHØ	Mass density (Real)
A	Thermal expansion coefficient (Real)
TREF	Thermal expansion reference temperature (Real)
GE	Structural element damping coefficient (Real)
ST, SC, SS	Stress limits for tension, compression and shear (Real) (Required for Property Optimization calculations; otherwise optional if margins of safety are desired.)

Remarks:

1. One of E or G must be positive (i.e., either E > 0.0 or G > 0.0 or both E and G may be > 0.0).
2. If any one of E, G or NU is blank, it will be computed to satisfy the identity E = 2(1+NU)G; otherwise, values supplied by the user will be used.
3. The material identification number must be unique for all MAT1, MAT2 and MAT3 cards.
4. MAT1 materials may be made temperature dependent by use of the MATT1 card.
5. The mass density, RHØ, will be used to automatically compute mass for all structural elements except the two-dimensional bending only elements TRBSC, TRPLT and QDPLT.
6. If E and NU or G and NU are both blank they will be both given the value 0.0.
7. Weight density may be used in field 6 if the value $\frac{1}{g}$ is entered on the PARAM card WTMASS, where g is the acceleration of gravity.
8. Solid elements must not have NU equal to 0.5.

Input Data Card PBAR Simple Beam Property

Description: Defines the properties of a simple beam (bar) which is used to create bar elements via the CBAR card.

Format and Example:

1	2	3	4	5	6	7	8	9	10
PBAR	PID	MID	A	I1	I2	J	NSM		abc
PBAR	39	6	2.9		5.97				123
+bc	C1	C2	D1	D2	E1	E2	F1	F2	def
+23			2.0	4.0					
+ef	K1	K2	I12						

Field	Contents
PID	Property identification number (Integer > 0)
MID	Material identification number (Integer > 0)
A	Area of bar cross-section (Real)
I1, I2, I12	Area moments of inertia (Real, $I_1 I_2 \geq I_{12}^2$)
J	Torsional constant (Real)
NSM	Nonstructural mass per unit length (Real)
K1, K2	Area factor for shear (Real)
Ci, Di, Ei, Fi	Stress recovery coefficients (Real)

Remarks: 1. For structural problems, PBAR cards may only reference MAT1 material cards.

2. See Section 1.3.2 for a discussion of bar element geometry.

3. For heat transfer problems, PBAR cards may only reference MAT4 or MAT5 material cards.

Input Data Card PELAS Scalar Elastic Property

Description: Used to define the stiffness, damping coefficient, and stress coefficient of a scalar elastic element (spring) by means of the CELAS1 or CELAS3 card.

Format and Example:

1	2	3	4	5	6	7	8	9	10
PELAS	PID	K	GE	S	PID	K	GE	S	
PELAS	7	4.29	0.06	7.92	27	2.17	0.0032		

Field	Contents
PID	Property identification number (Integer > 0)
K	Elastic property value (Real)
GE	Damping coefficient, g_e (Real)
S	Stress coefficient (Real)

Remarks:
1. The user is cautioned to be careful using negative spring values. (Values are defined directly on some of the CELASi card types.)
2. One or two elastic spring properties may be defined on a single card.
3. For a discussion of scalar elements, see Section 5.6 of the Theoretical Manual.

Input Data Card PQDMEM2 Quadrilateral Membrane Property

Description: Used to define the properties of a quadrilateral membrane. Referenced by the CQDMEM2 card. No bending properties are included.

Format and Example:

1	2	3	4	5	6	7	8	9	10
PQDMEM2	PID	MID	T	NSM	PID	MID	T	NSM	
PQDMEM2	235	2	0.5	0.0					

Field	Contents
PID	Property identification number (Integer > 0)
MID	Material identification number (Integer > 0)
T	Thickness of membrane (Real > 0.0)
NSM	Nonstructural mass per unit area (Real)

Remarks: 1. All PQDMEM2 cards must have unique property identification numbers.

2. One or two quadrilateral membrane properties may be defined on a single card.

Input Data Card PQUAD1 General Quadrilateral Element Property

Description: Defines the properties of a general quadrilateral element of the structural model, including bending, membrane, and transverse shear effects. Referenced by the CQUAD1 card.

Format and Example:

1	2	3	4	5	6	7	8	9	10
PQUAD1	PID	MID1	T1	MID2	I	MID3	T3	NSM	abc
PQUAD1	32	16	2.98	9	6.45	16	5.29	6.32	WXYZ1
+bc	Z1	Z2							
+XYZ1	0.09	-0.06							

Field	Contents
PID	Property identification number (Integer > 0)
MID1	Material identification number for membrane (Integer ≥ 0)
T1	Membrane thickness (Real)
MID2	Material identification number for bending (Integer ≥ 0)
I	Area moment of inertia per unit width (Real)
MID3	Material identification number for transverse shear (Integer ≥ 0)
T3	Transverse shear thickness (Real)
NSM	Nonstructural mass per unit area (Real)
Z1, Z2	Fiber distances for stress computation, positive according to the right-hand sequence defined on the CQUAD1 card (Real)

Remarks: 1. All PQUAD1 cards must have unique property identification numbers.

2. If T3 is zero, the element is assumed to be rigid in transverse shear.

3. The membrane thickness, T1, is used to compute the structural mass for this element.

Input Data Card PSHEAR Shear Panel Property

Description: Defines the elastic properties of a shear panel. Referenced by the CSHEAR card.

Format and Example:

1	2	3	4	5	6	7	8	9	10
PSHEAR	PID	MID	T	NSM	PID	MID	T	NSM	
PSHEAR	13	2	4.9	16.2	14	6	4.9	14.7	

Field	Contents
PID	Property identification number (Integer > 0)
MID	Material identification number (Integer > 0)
T	Thickness of shear panel (Real ≠ 0.0)
NSM	Nonstructural mass per unit area (Real)

Remarks: 1. All PSHEAR cards must have unique identification numbers.

2. PSHEAR cards may only reference MAT1 material cards.

3. One or two shear panel properties may be defined on a single card.

Input Data Card PTRIA1 General Triangular Element Property

Description: Defines the properties of a general triangular element of the structural model, including bending, membrane and transverse shear effects. Referenced by the CTRIA1 card.

Format and Example:

1	2	3	4	5	6	7	8	9	10
PTRIA1	PID	MID1	T1	MID2	I	MID3	T3	NSM	abc
PTRIA1	32	16	2.98	9	6.45	16	5.29	6.32	QED
+bc	Z1	Z2							
+ED									

Field	Contents
PID	Property identification number (Integer > 0)
MID1	Material identification number for membrane (Integer ≥ 0)
T1	Membrane thickness (Real)
MID2	Material identification number for bending (Integer ≥ 0)
I	Area of moment of inertia per unit width (Real)
MID3	Bending material identification number for transverse shear (Integer ≥ 0)
T3	Transverse shear thickness (Real)
NSM	Nonstructural mass per unit area (Real)
Z1, Z2	Fiber distances for stress calculations, positive according to the right-hand sequence defined on the CTRIA1 card (Real)

Remarks: 1. All PTRIA1 cards must have unique property identification numbers.

2. If T3 is zero, the element is assumed to be rigid in transverse shear.

3. The membrane thickness, T1, is used to compute the structural mass for this element.

Input Data Card PTRMEM Triangular Membrane Property

Description: Used to define the properties of a triangular membrane element. Referenced by the CTRMEM card. No bending properties are included.

Format and Example:

1	2	3	4	5	6	7	8	9	10
PTRMEM	PID	MID	T	NSM	PID	MID	T	NSM	
PTRMEM	17	23	4.25	0.2					

Field	Contents
PID	Property identification number (Integer > 0)
MID	Material identification number (Integer > 0)
T	Membrane thickness (Real> 0.0)
NSM	Nonstructural mass per unit area (Real)

Remarks: 1. All PTRMEM cards must have unique property identification numbers.

2. One or two triangular membrane properties may be defined on a single card.

Input Data Card SPC1 Single-Point Constraint

Description: Defines sets of single-point constraints.

Format and Example:

1	2	3	4	5	6	7	8	9	10
SPC1	SID	C	G1	G2	G3	G4	G5	G6	abc
SPC1	3	2	1	3	10	9	6	5	ABC
+bc	G7	G8	G9	-etc.-					
+BC	2	8							

Alternate Form

SPC1	SID	C	GID1	"THRU"	GID2				
SPC1	313	12456	6	THRU	32				

Field	Contents
SID	Identification number of single-point constraint set (Integer > 0)
C	Component number (Any unique combination of the digits 1-6 (with no imbedded blanks) when point identification numbers are grid points; must be null if point identification numbers are scalar points)
Gi, GIDi	Grid or scalar point identification numbers (Integer > 0)

Remarks:

1. Note that enforced displacements are not available via this card. As many continuation cards as desired may appear when "THRU" is not used.
2. A coordinate referenced on this card may not appear as a dependent coordinate in a multipoint constraint relation, nor may it be referenced on a SPC, ØMIT, ØMIT1, SUPØRT card.
3. Single-point constraint sets must be selected in the Case Control Deck (SPC=SID) to be used by NASTRAN.
4. SPC degrees of freedom may be redundantly specified as permanent constraints on the GRID card.
5. All grid points referenced by GID1 thru GID2 must exist.

Appendix C

WING STRUCTURE

Wing NASTRAN Model

Four-digit grid numbering scheme

Item	Rib no.	Spar no.
Grid numbers =	XX	YY

Five-digit CONROD and bar element numbering scheme

Item	Orientations	Rib no.	Spar no.
Spars	Blank	XX	YY
Ribs	1	XX	YY
Rods normal to surface	3	XX	YY

Six-digit shear panel and membrane element numbering scheme

Item	Orientations	Shape*	Rib no.	Spar no.
Rib webs	1	W	XX	YY
Cover skins	2	W	XX	YY
Spar webs	3	W	XX	YY

*W = 0 - quadrilateral
W = 1 - triangular

Lowest grid no. of panel when possible

Five-digit CELASI (actuator and track stiffness - scalar spring) element numbering scheme

Item	Orientations	Rib no.	Spar no.
Scalar spring in X direction	1	XX	YY
Scalar spring in Y direction	2	XX	YY
Scalar spring in Z direction	3	XX	YY

Lower grid no. when possible

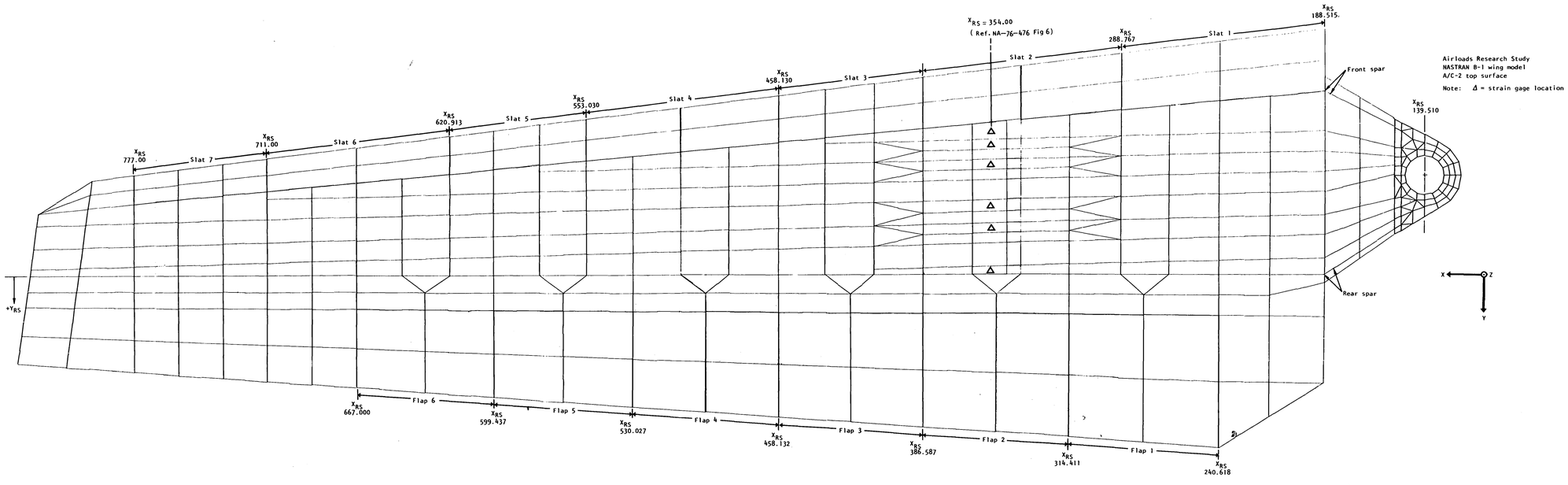


Figure C-1. - NASTRAN wing model..

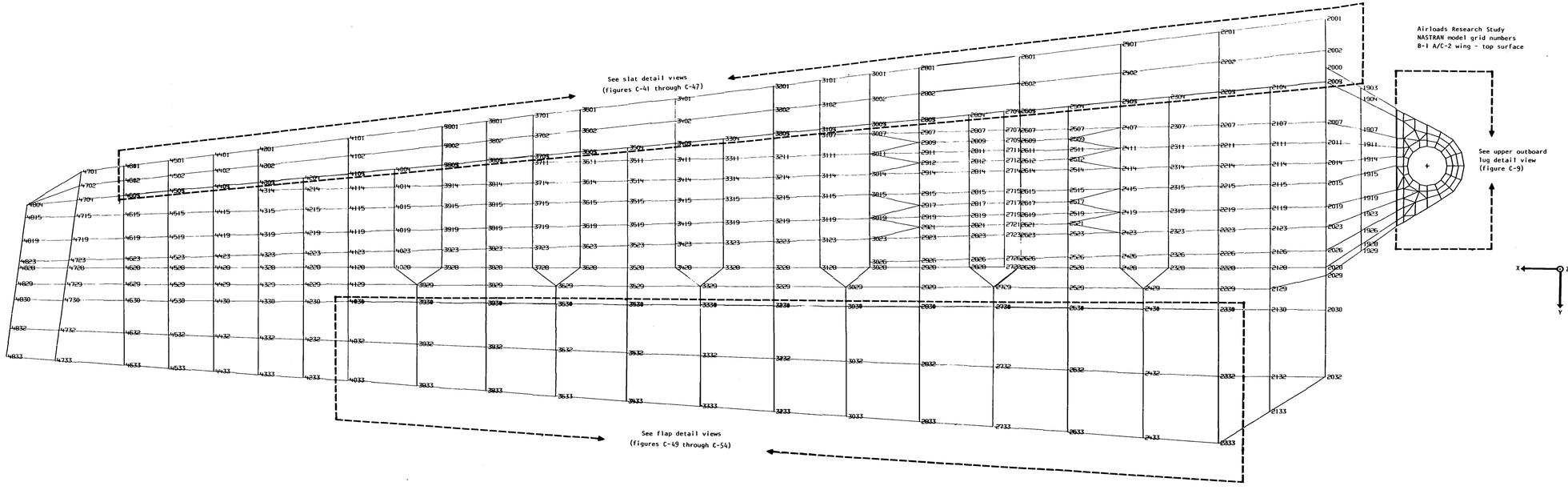


Figure C-2. - NASTRAN wing model - top surface grid numbers.

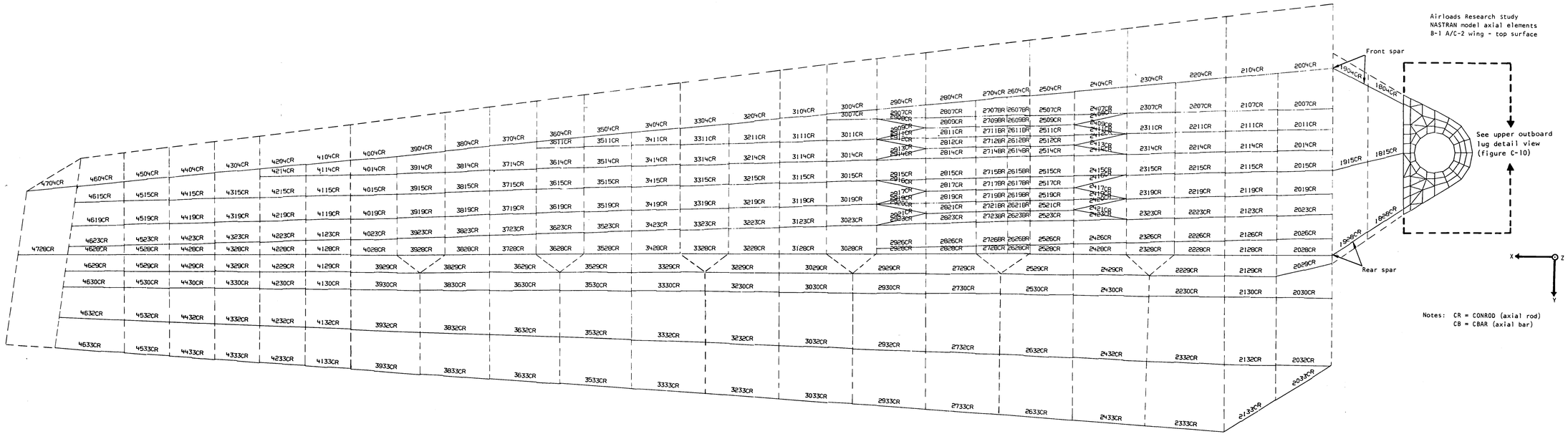


Figure C-3. - NASTRAN wing model - top surface axial elements.

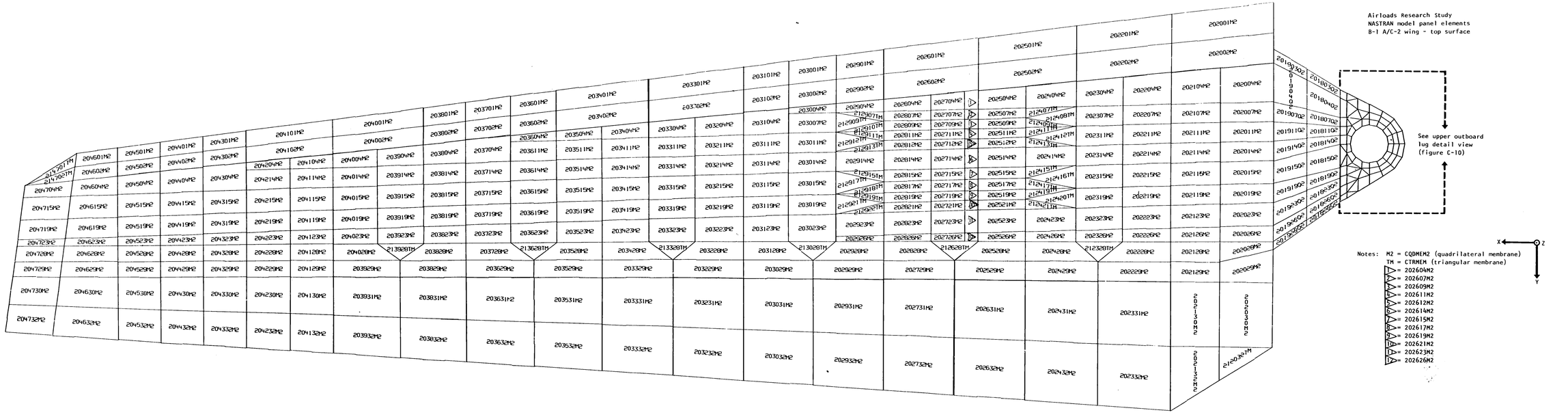


Figure C-4. - NASTRAN wing model - top surface panel ID.

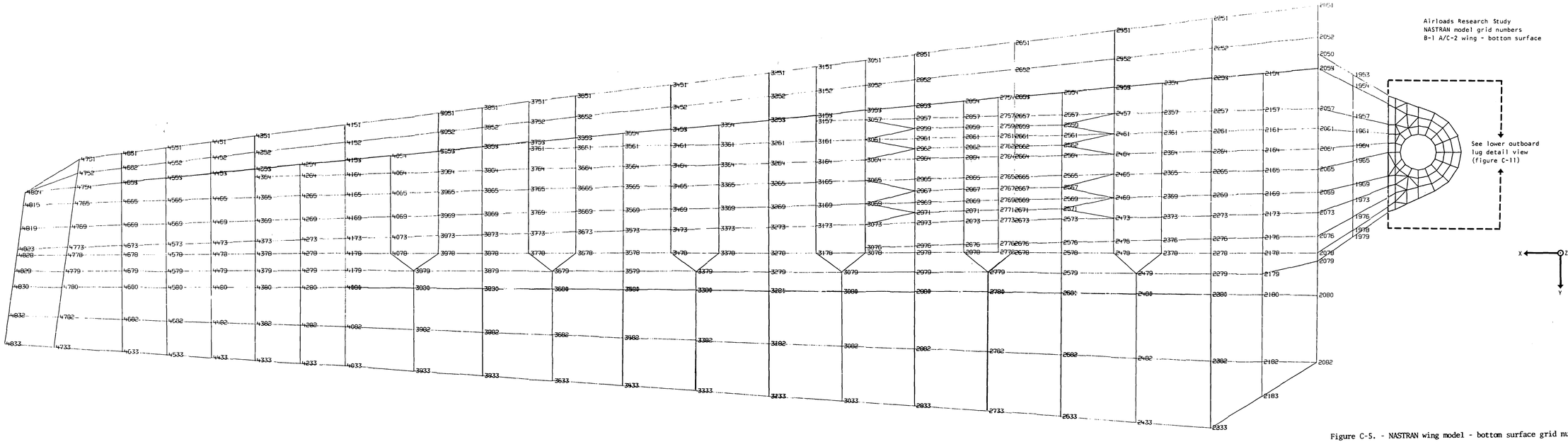


Figure C-5. - NASTRAN wing model - bottom surface grid numbers.

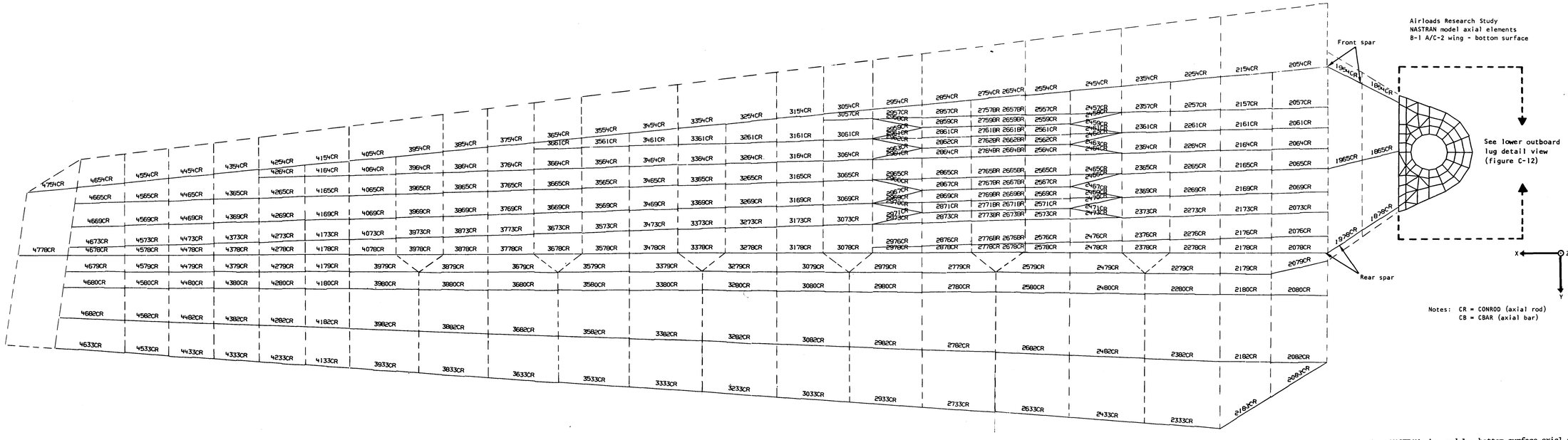


Figure C-6. - NASTRAN wing model - bottom surface axial elements.

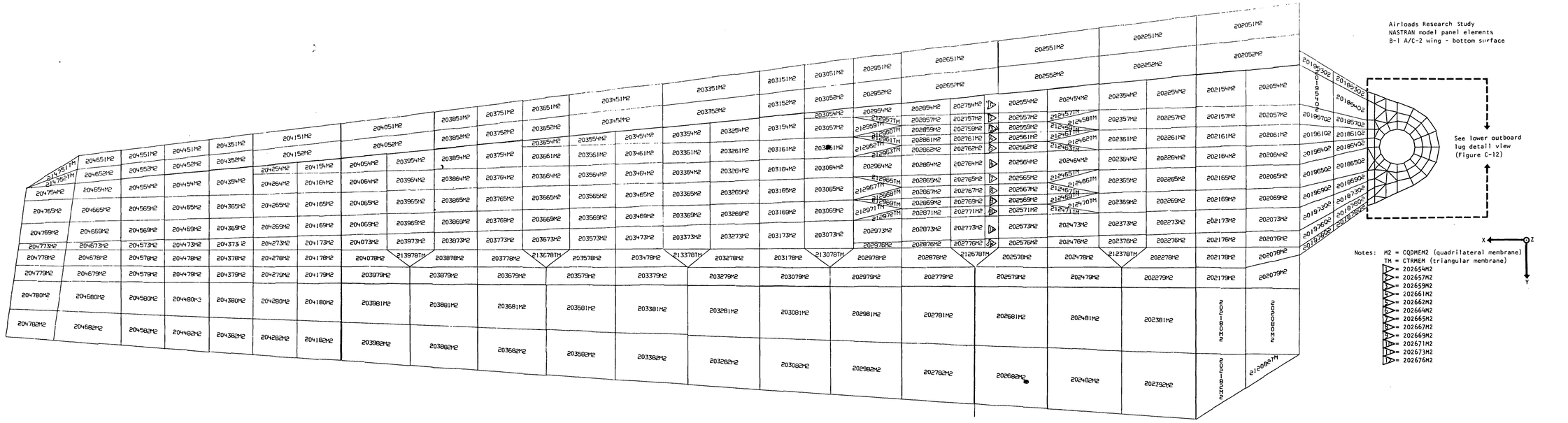


Figure C-7. - NASTRAN wing model - bottom surface panel ID.

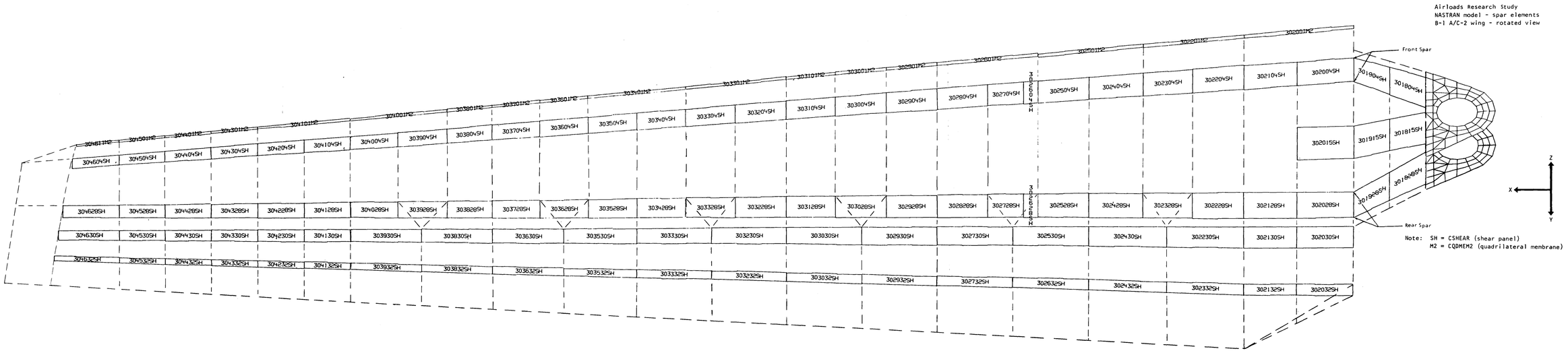


Figure C-8. - NASTRAN model - wing spar ID.

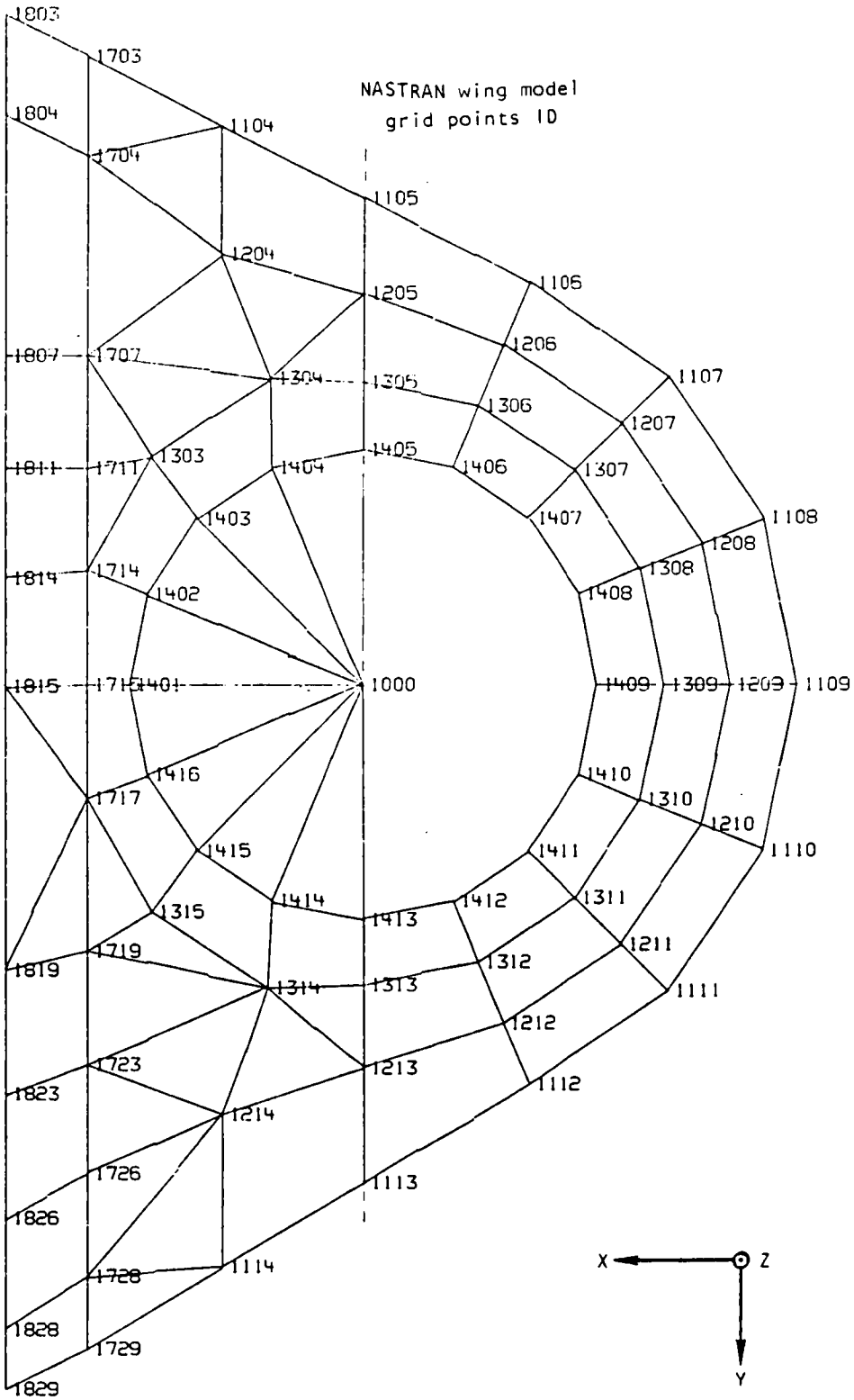


Figure C-9. - Upper outboard wing pivot lug.

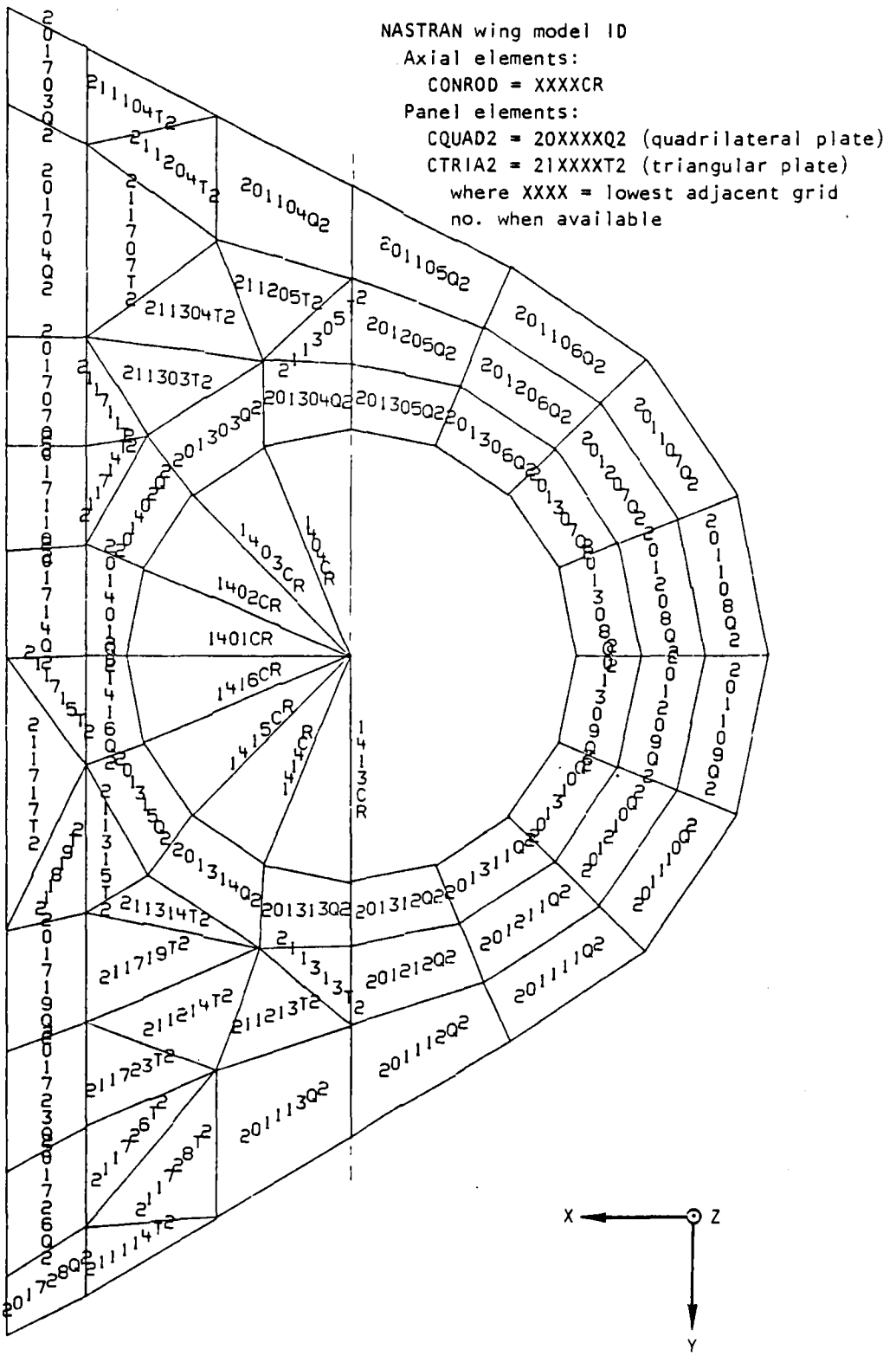


Figure C-10. - Upper outboard wing pivot lug elements.

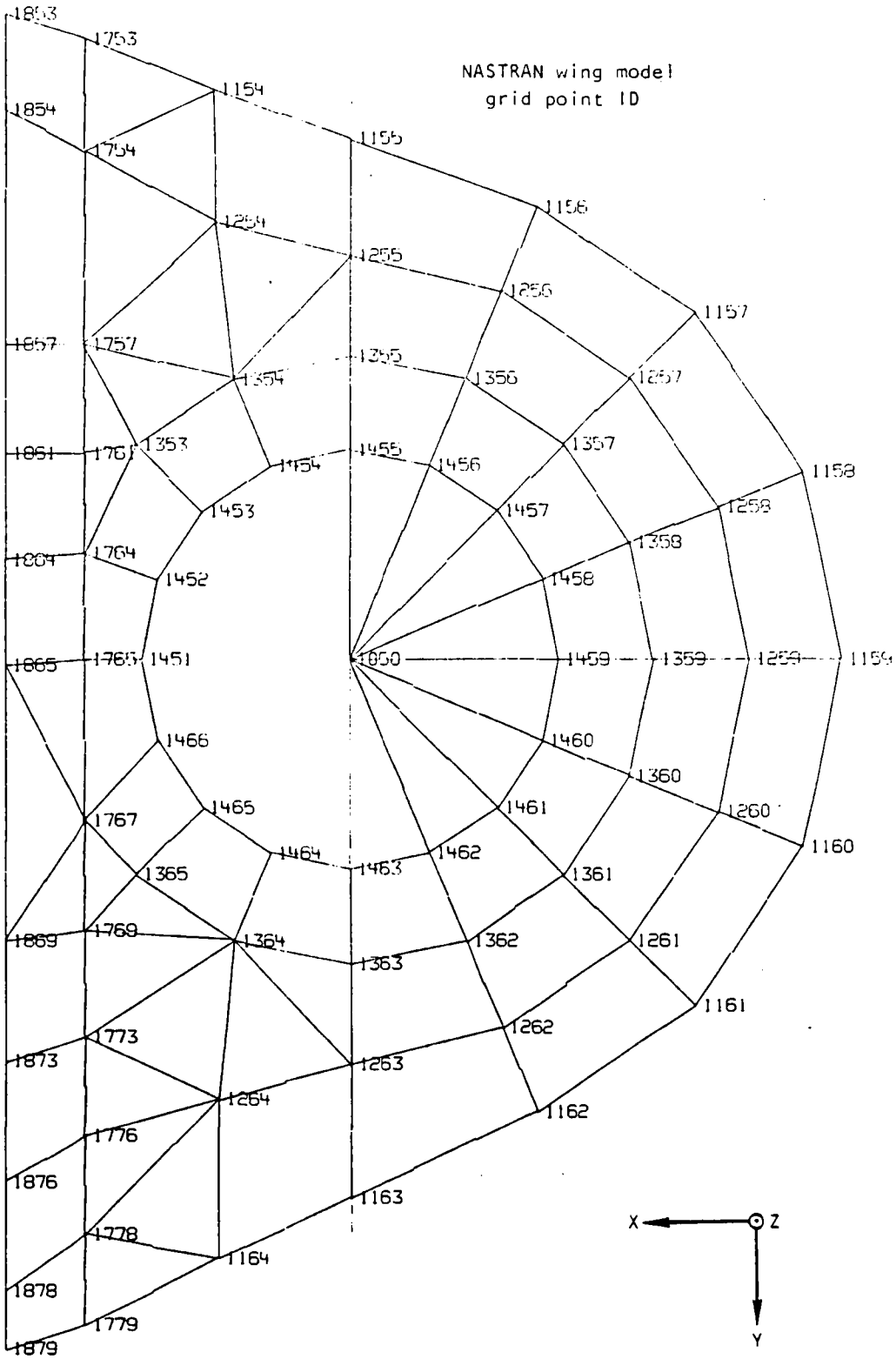


Figure C-11. - Lower outboard wing pivot lug.

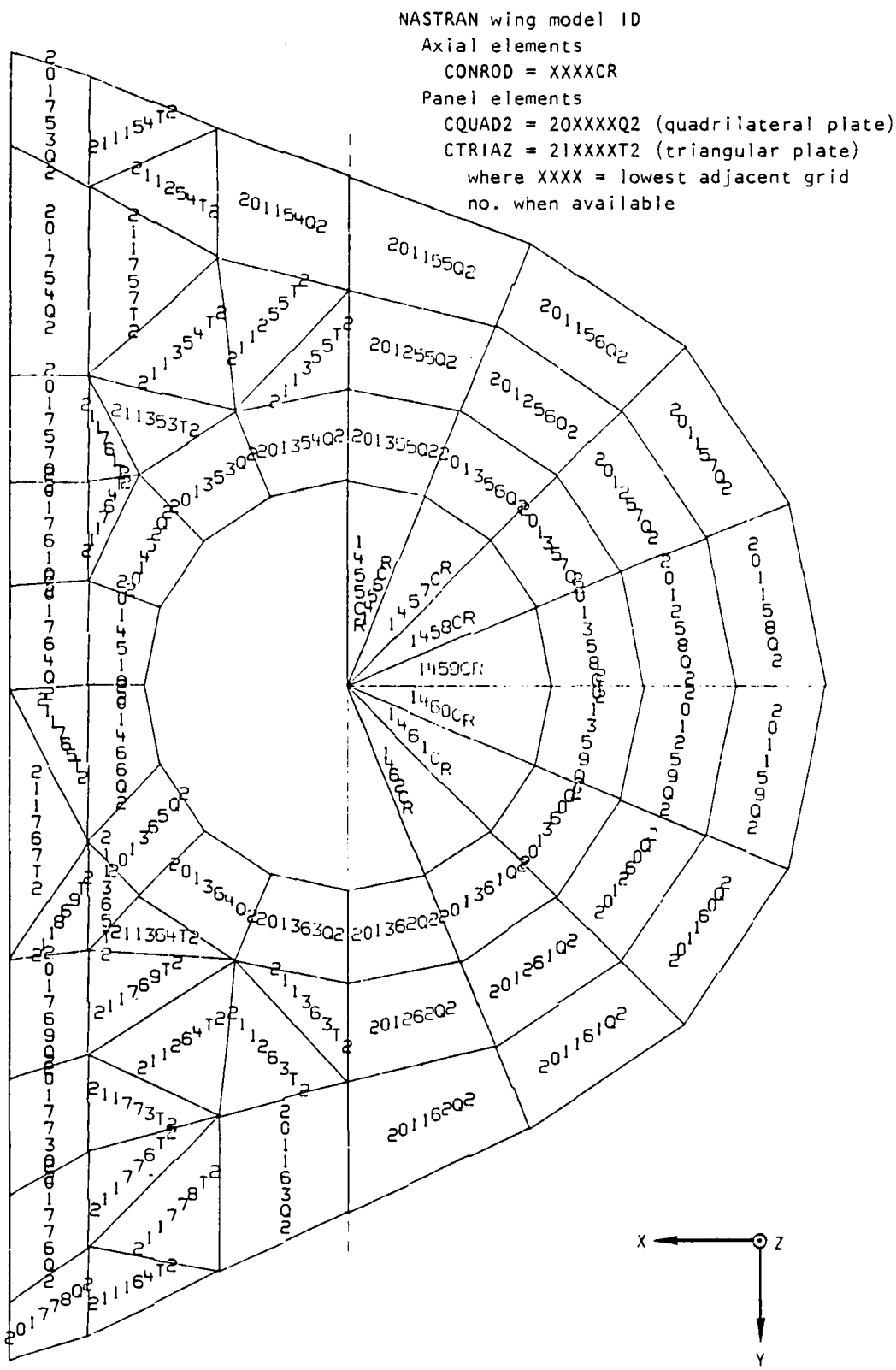


Figure C-12. - Lower outboard wing lug elements.

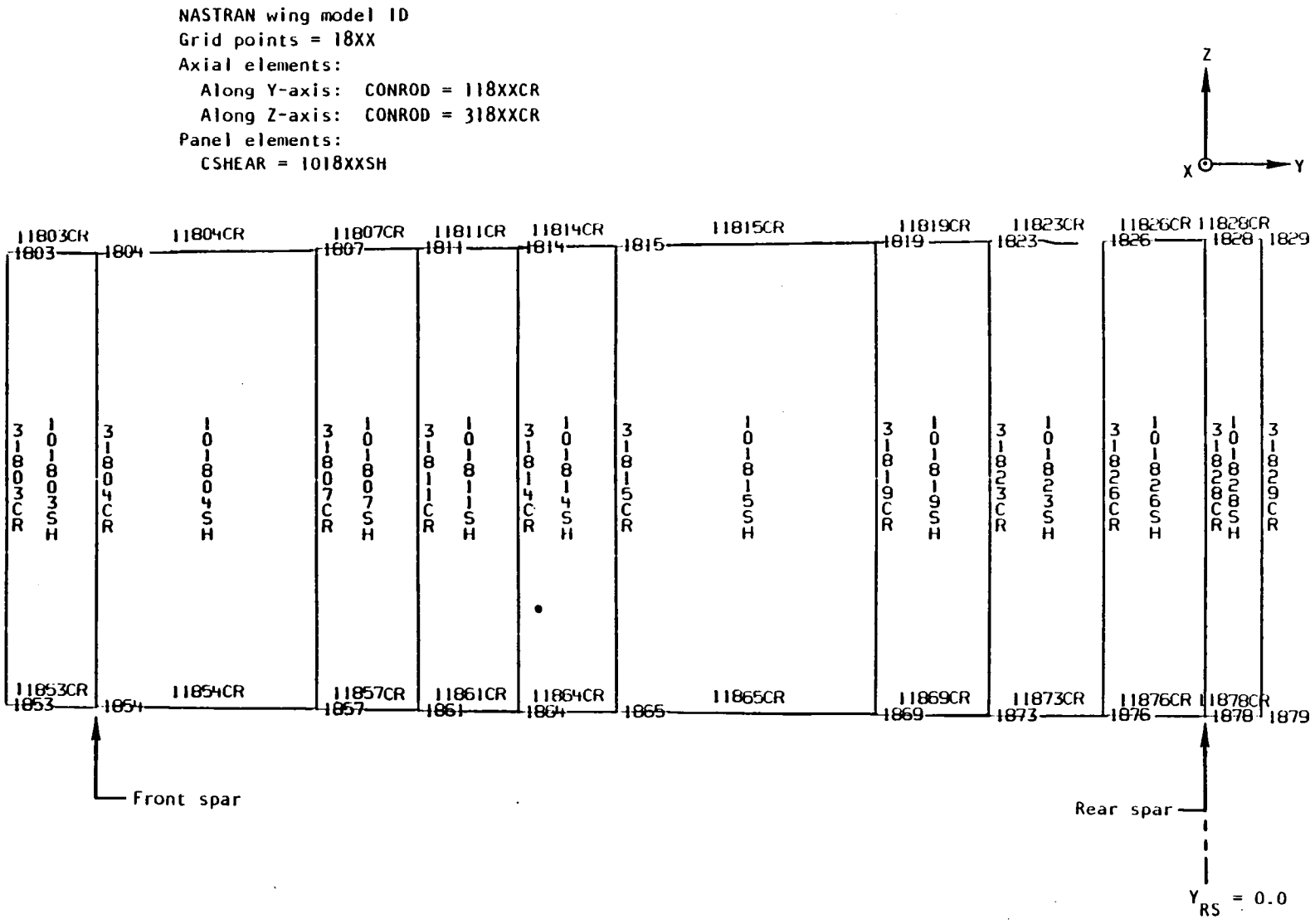


Figure C-13. - Wing rib station 154.515 (transition area).

NASTRAN wing model ID
Grid points = 20XX
Axial elements:
  Along Y-axis: CONROD = 120XXCR
  Along Z-axis: CONROD = 320XXCR
  Along Z-axis: CBAR = 320XXBR
Panel elements
  CSHEAR = 1020XXSH

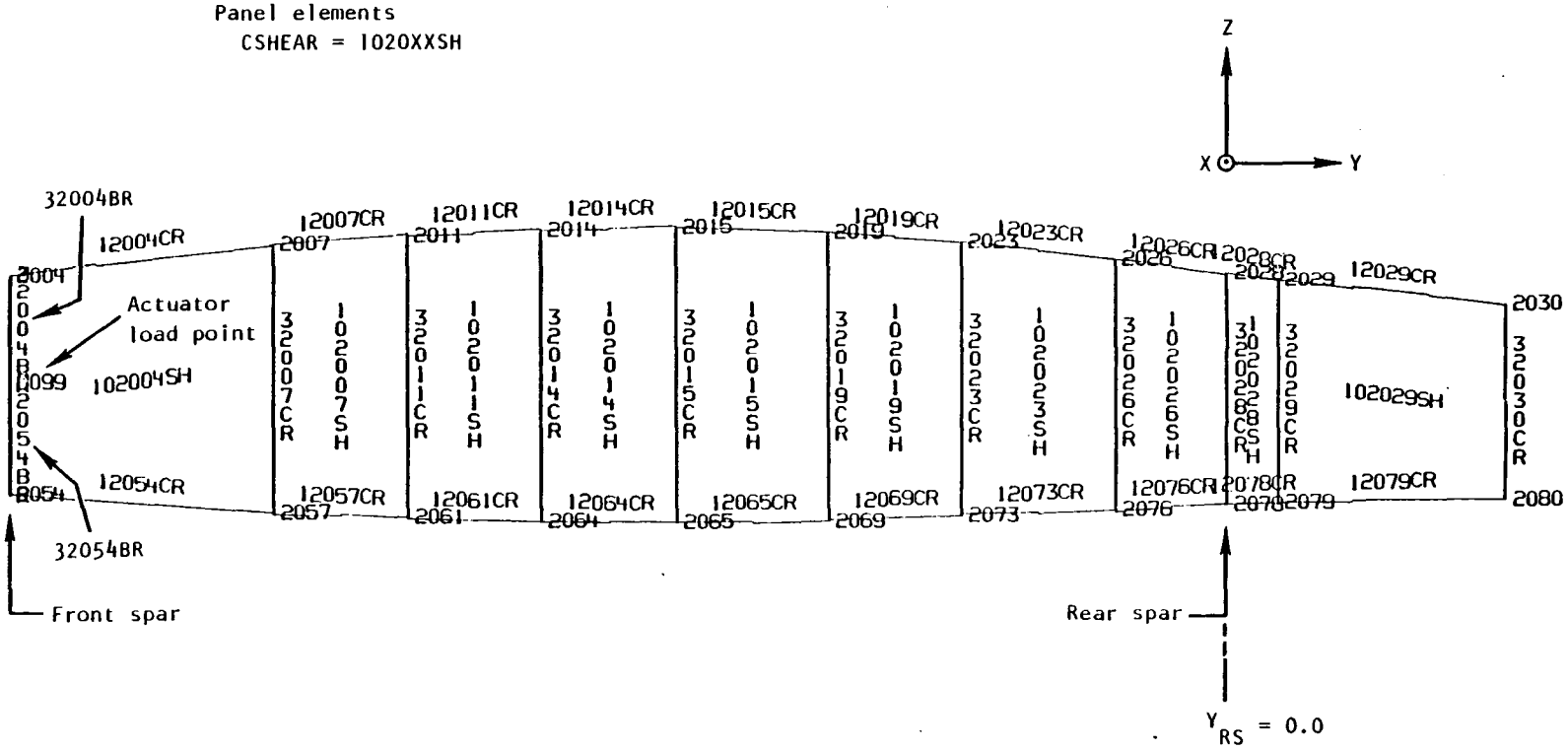


Figure C-14. - Wing rib station 188.515 (main box).

NASTRAN wing model ID
Grid points = 21XX
Axial elements
  Along Y-axis: CONROD = 121XXCR
  Along Z-axis: CONROD = 321XXCR
Panel elements
  CSHEAR = 1021XXSH

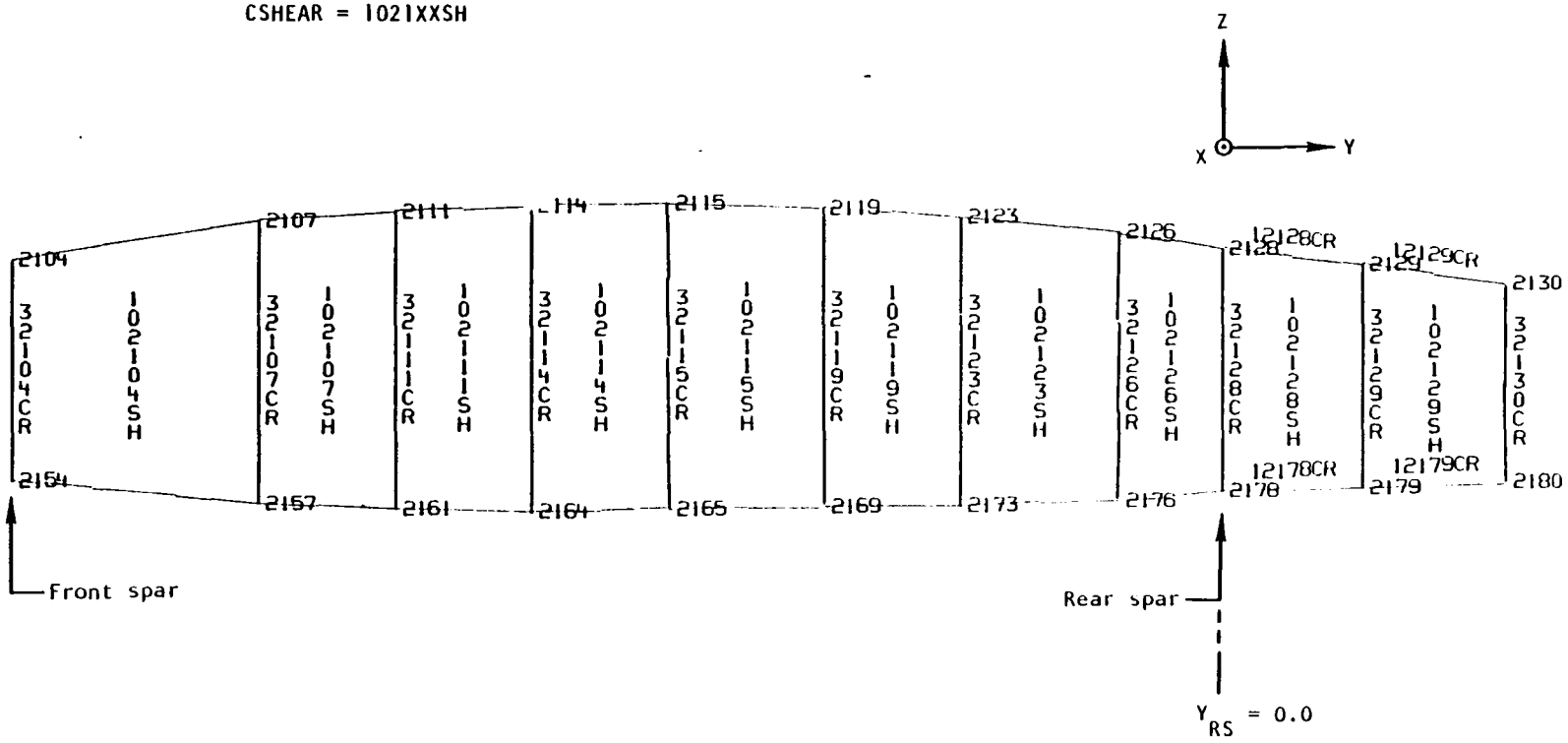


Figure C-15. - Wing rib station 215.515 (main box).

NASTRAN wing model ID
Grid points = 22XX
Axial elements
  Along Y-axis: CONROD = 122XXCR
  Along Z-axis: CONROD = 322XXCR
Panel elements
  CSHEAR = 1022XXSH

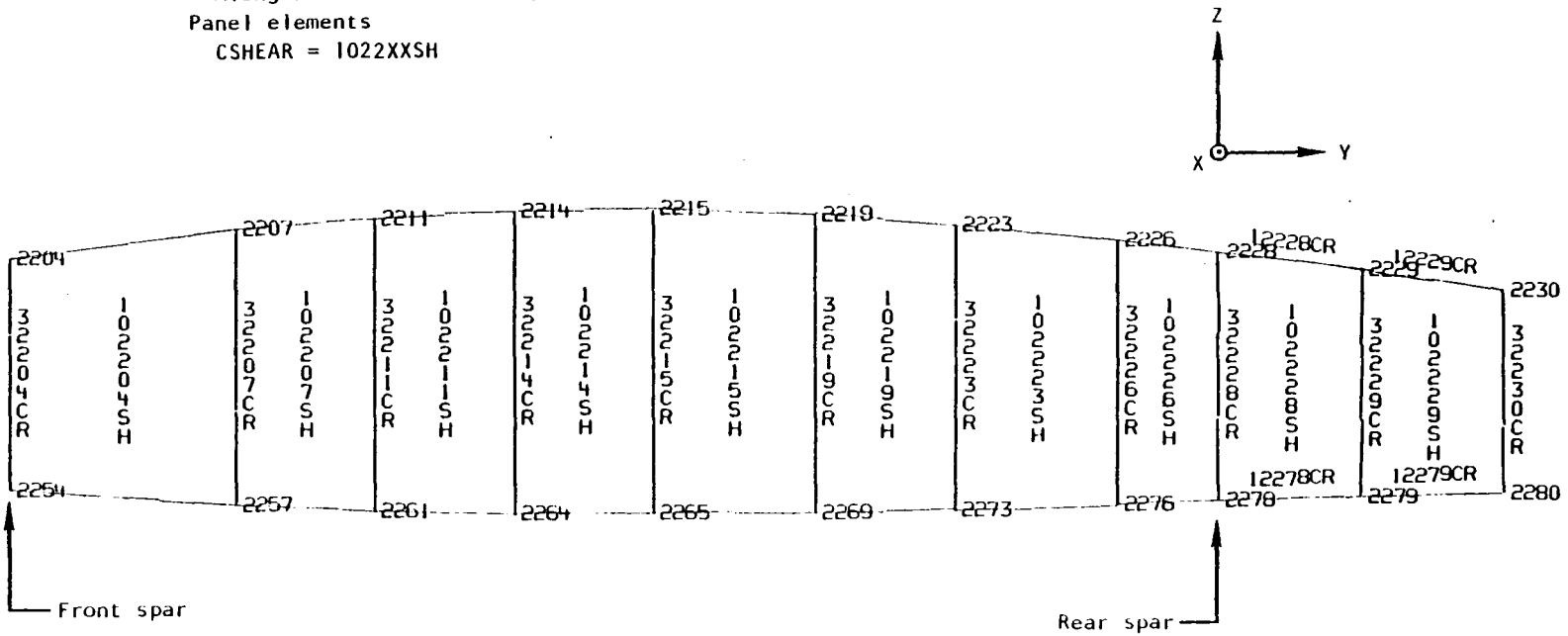


Figure C-16. - Wing rib station 240.618 (main box).

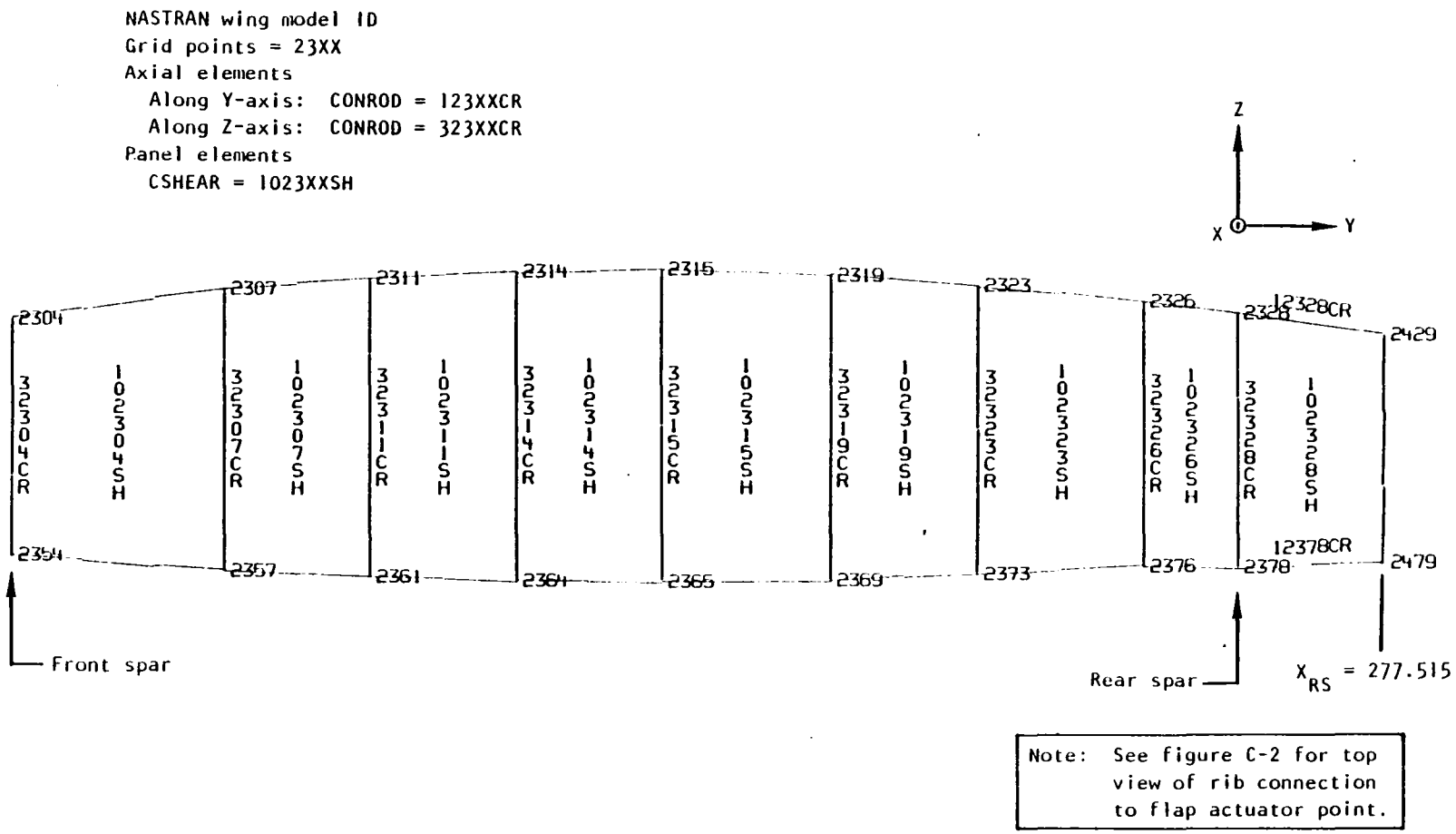


Figure C-17. - Wing rib station 265.215 (main box).

NASTRAN wing model ID
Grid points = 24XX
Axial elements
  Along Y-axis: CONROD = 124XXCR
  Along Z-axis: CONROD = 324XXCR
Panel elements
  CSHEAR = 1024XXSH

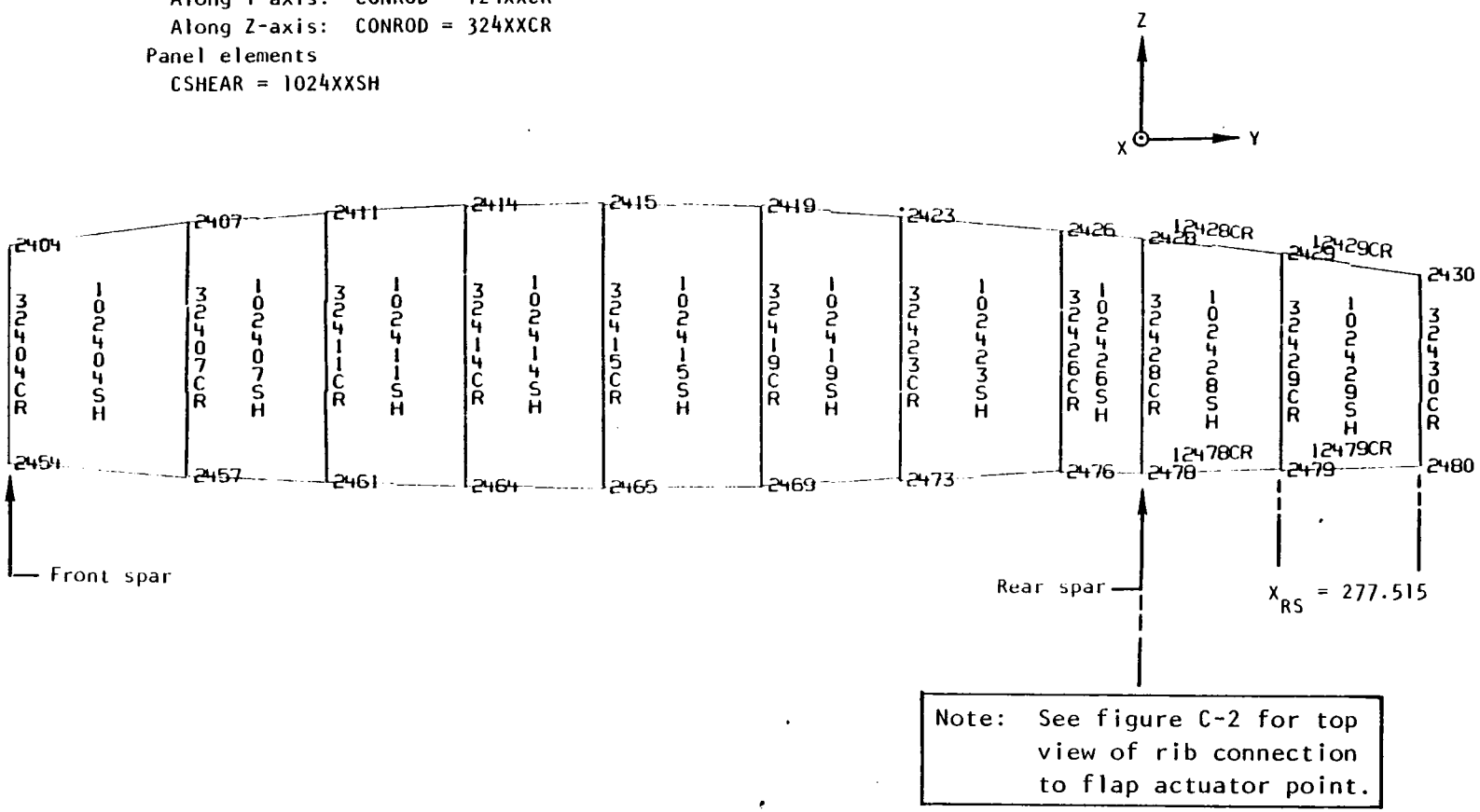


Figure C-18. Wing rib station 288.767 (main box).

NASTRAN wing model ID
Grid points = 25XX
Axial elements
  Along Y-axis: CONROD = 125XXCR
  Along Z-axis: CONROD = 325XXCR
Panel elements
  CSHEAR = 1025XXSH

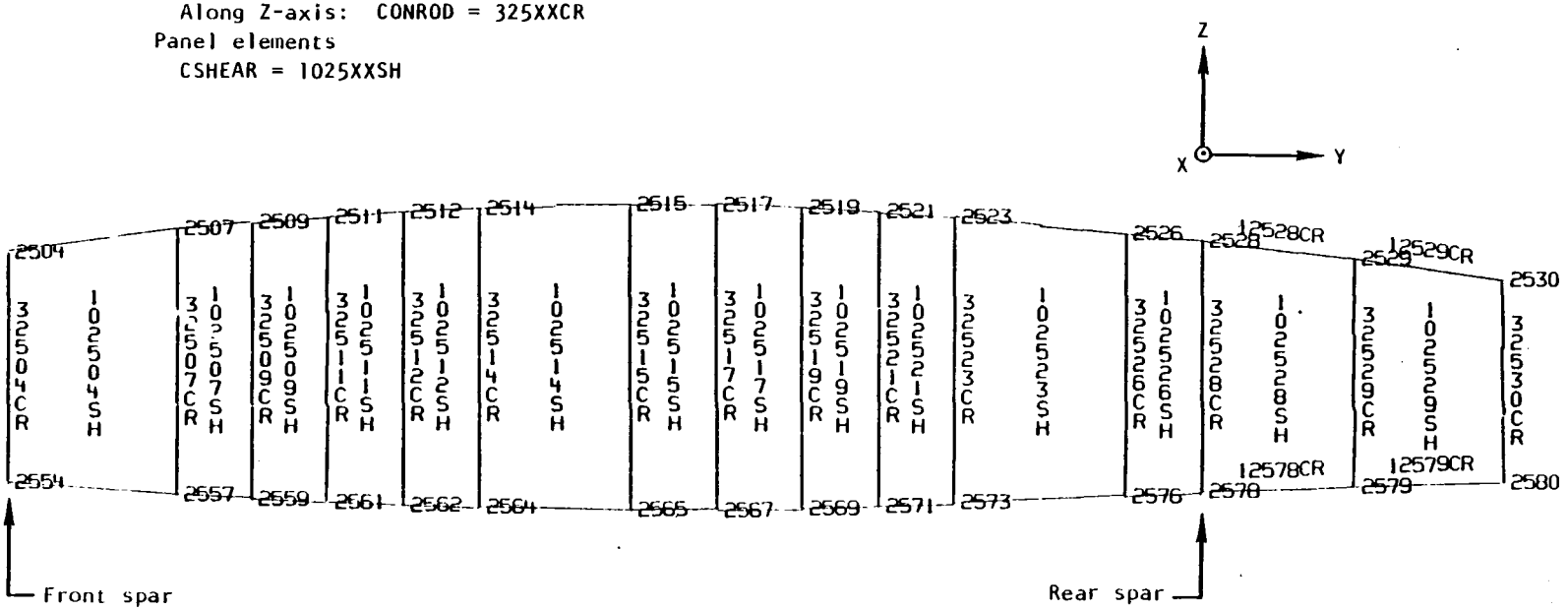


Figure C-19. - Wing rib station 314.411 (main box).

NASTRAN wing model ID
Grid points = 26XX
Axial elements
  Along Y-axis: CONROD = 126XXCR
  Along Z-axis: CONROD = 326XXCR
Panel elements
  CSHEAR = 1026XXSH

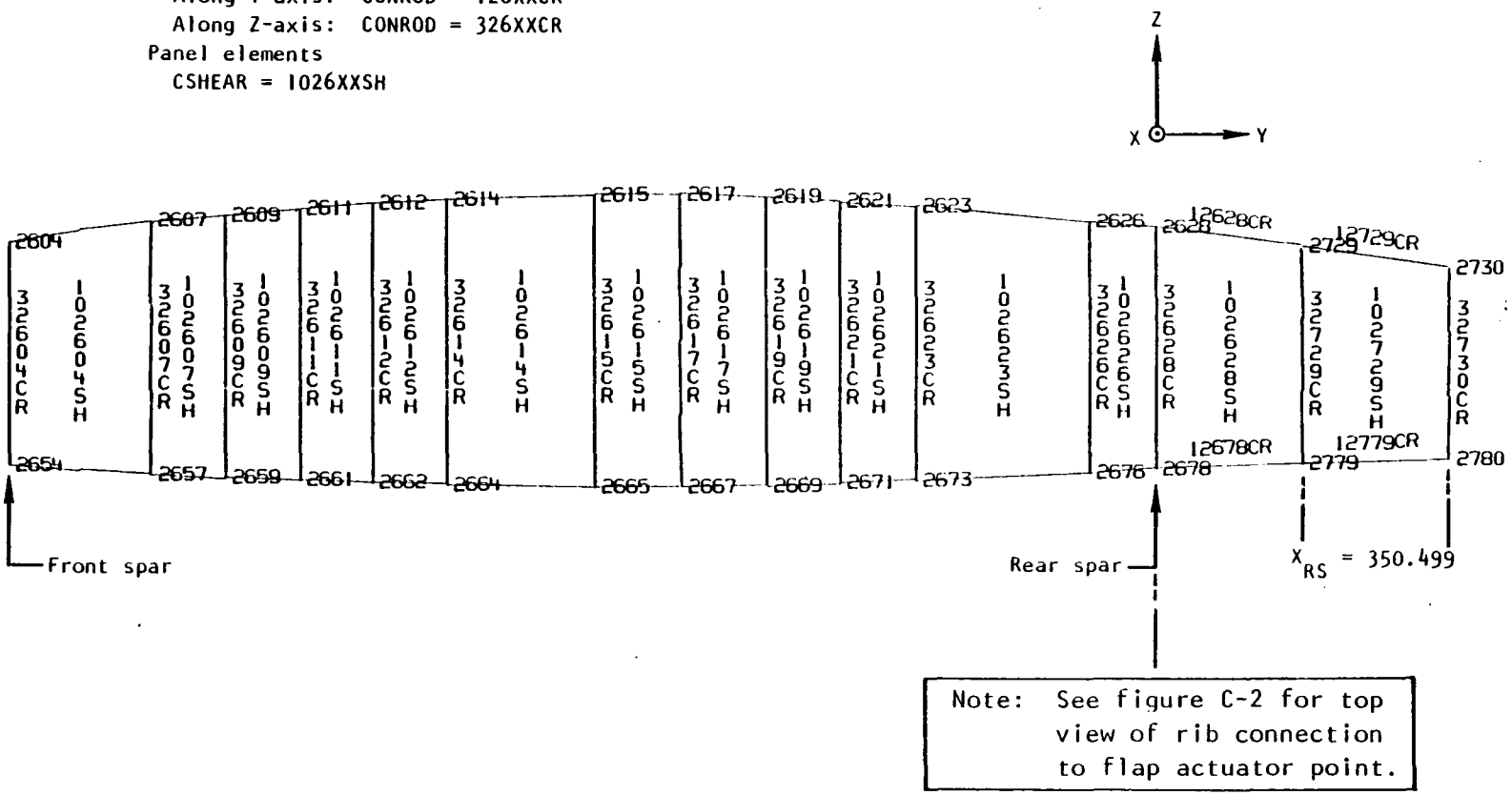


Figure C-20. - Wing rib station 338.470 (main box).

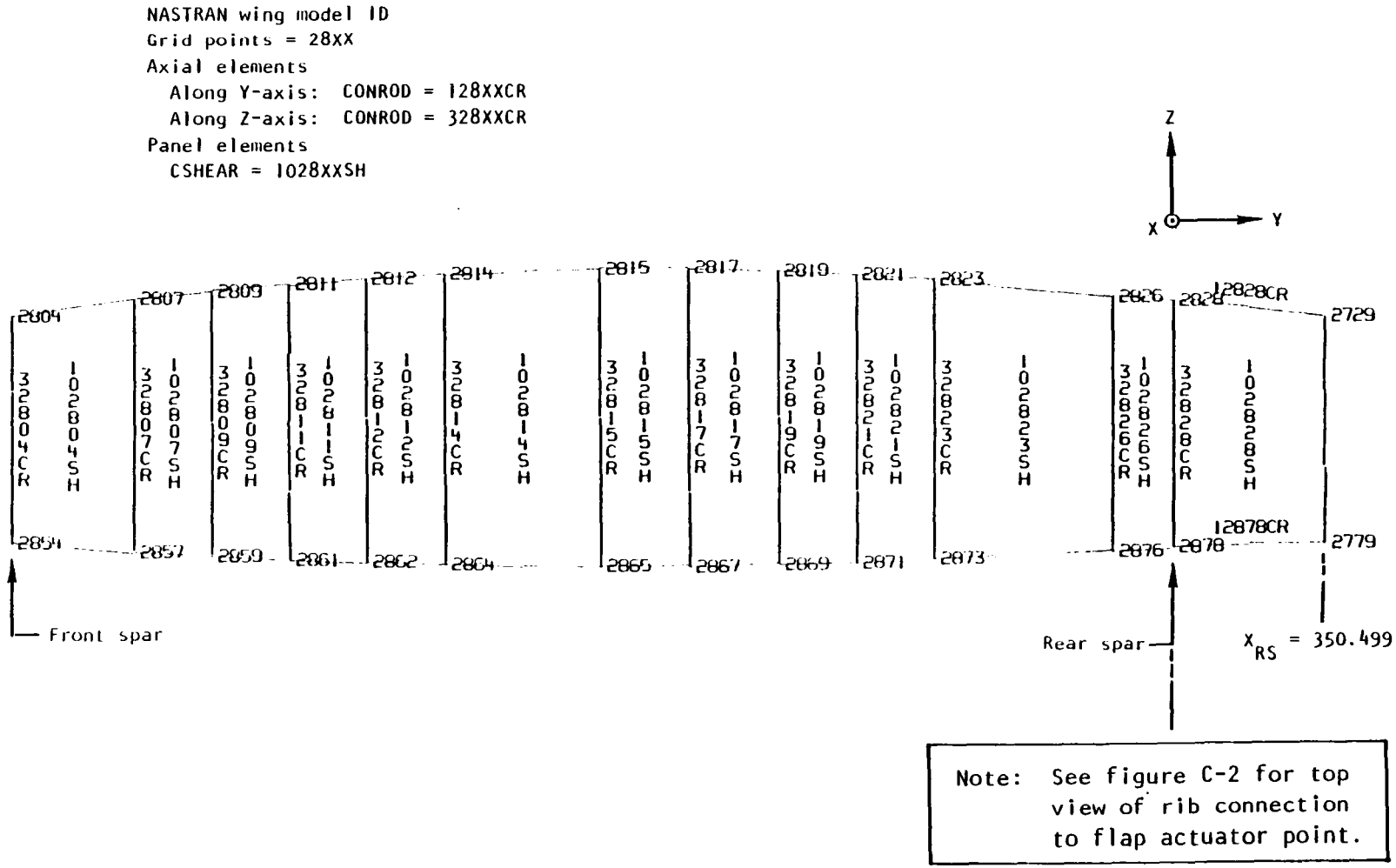


Figure C-21. - Wing rib station 362.529 (main box).

NASTRAN wing model ID
Grid points = 29XX
Axial elements
  Along Y-axis: CONROD = 129XXCR
  Along Z-axis: CONROD = 329XXCR
Panel elements
  CSHEAR = 1029XXSH

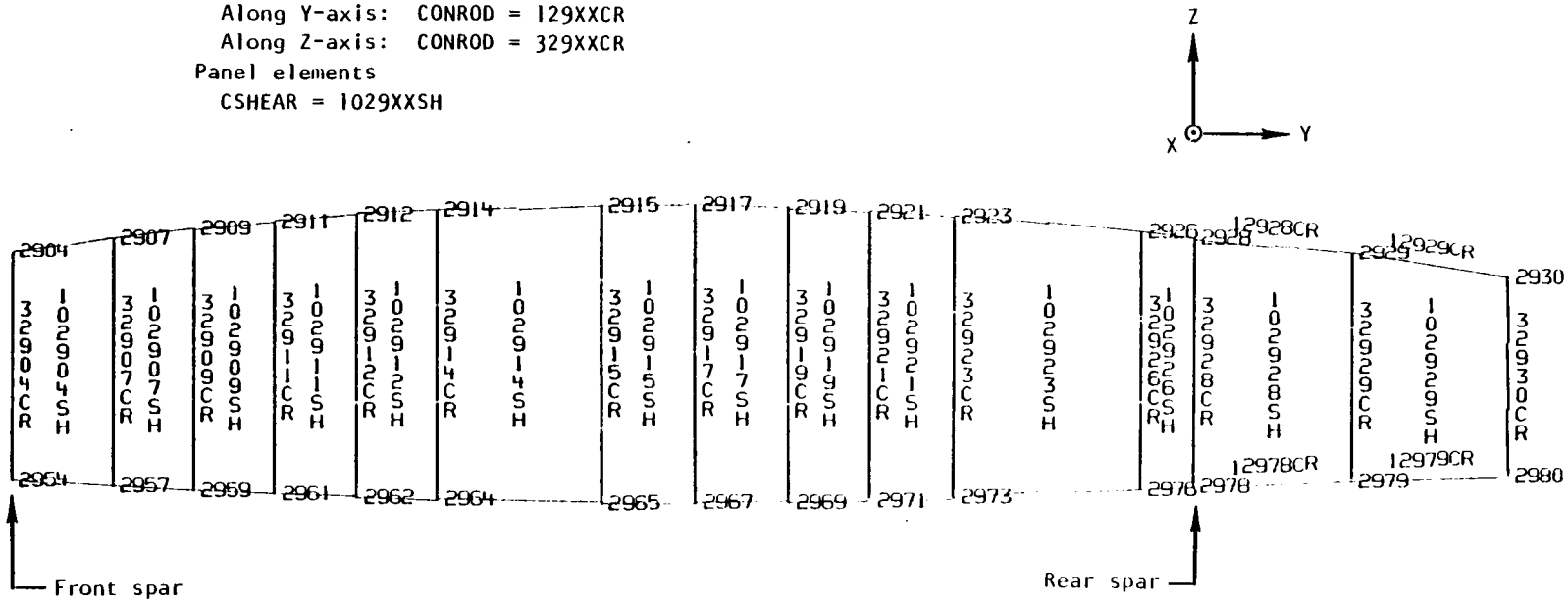


Figure C-22. - Wing rib station 386.587 (main box)

NASTRAN wing model ID
Grid points = 30XX
Axial elements
  Along Y-axis: CONROD = 130XXCR
  Along Z-axis: CONROD = 330XXCR
Panel elements
  CSHEAR = 1030XXSH

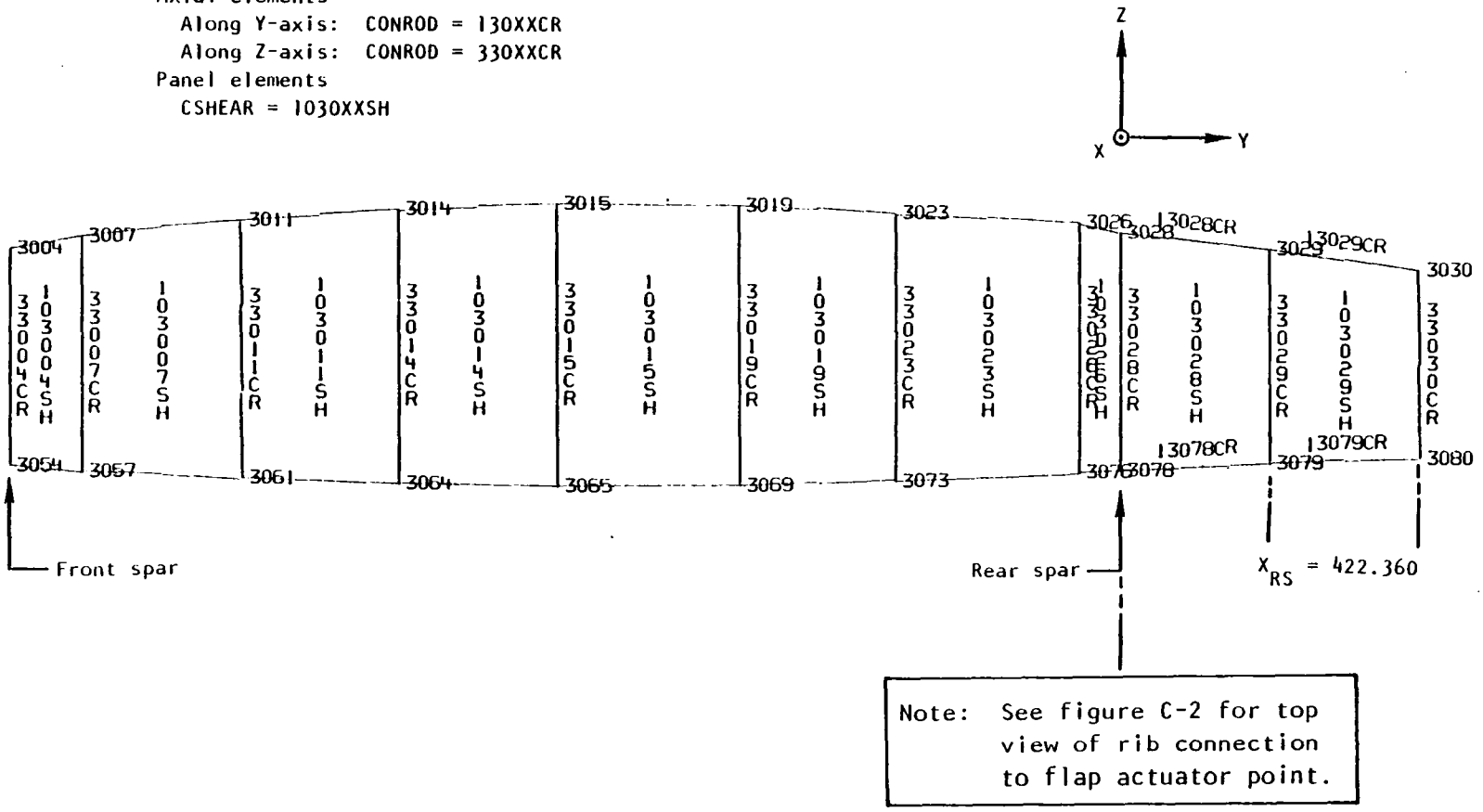


Figure C-23. - Wing rib station 410.780 (main box).

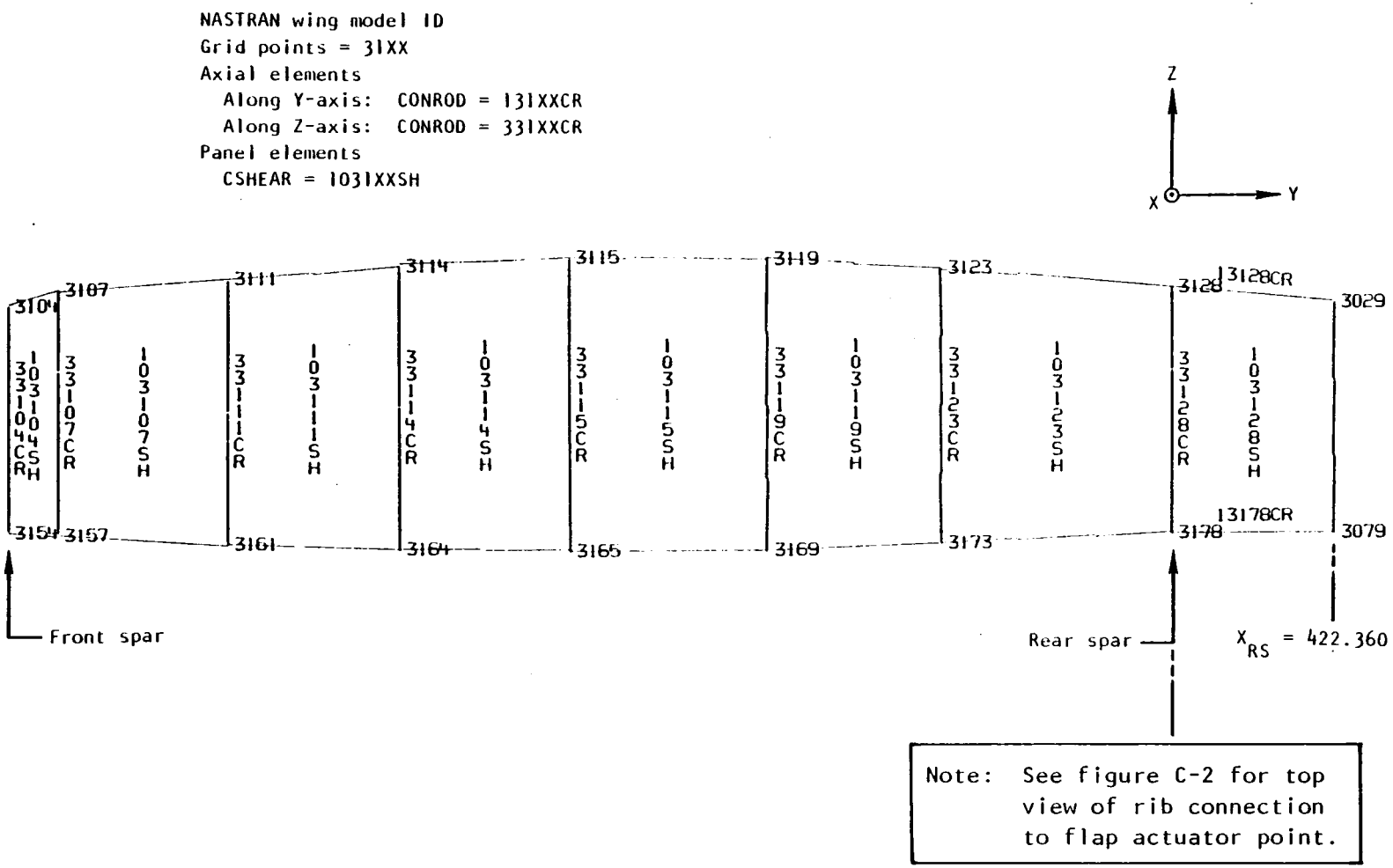


Figure C-24. - Wing rib station 434.980 (main box).

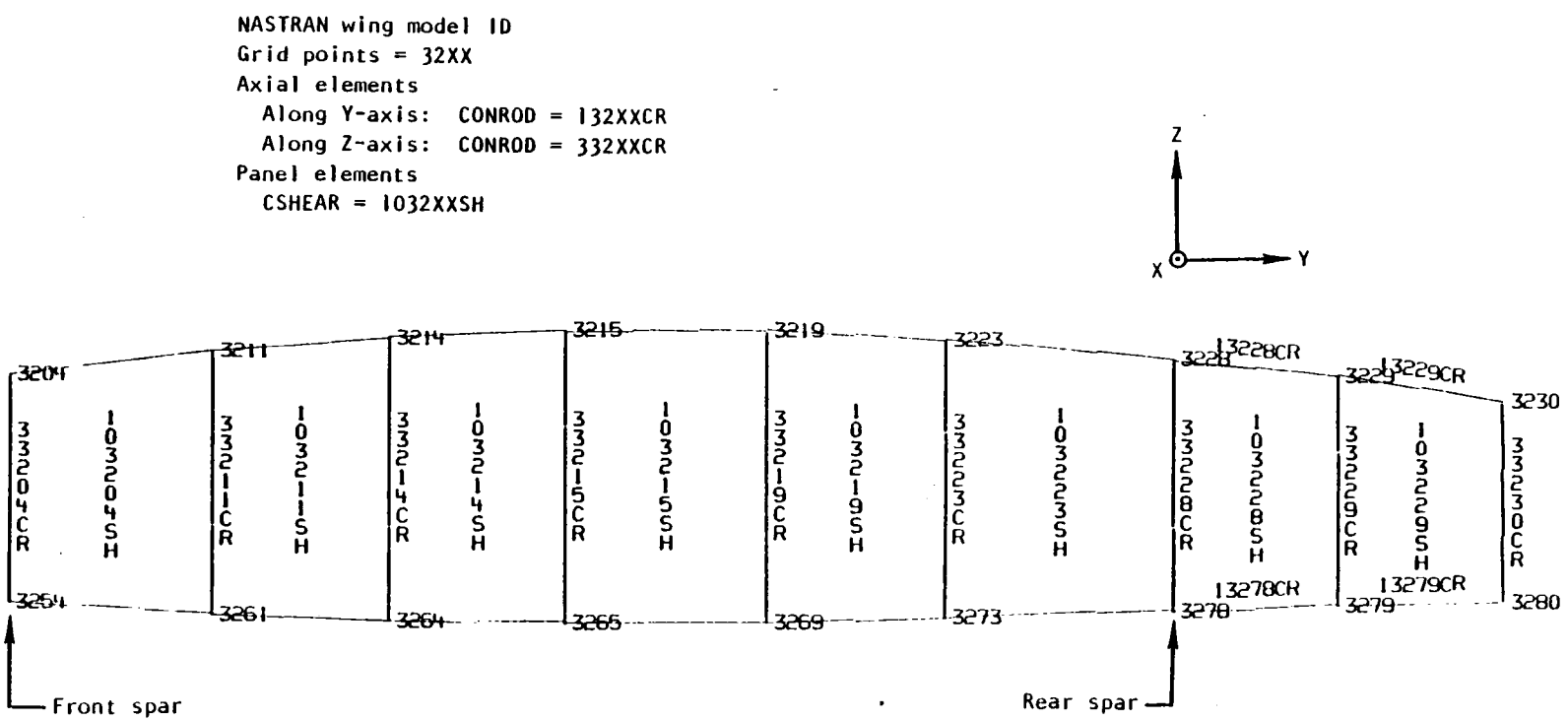


Figure C-25. - Wing rib station 458.130 (main box).

NASTRAN wing model ID
Grid points = 33XX
Axial elements
  Along Y-axis: CONROD = 133XXCR
  Along Z-axis: CONROD = 333XXCR
Panel elements
  CSHEAR = 1033XXSH

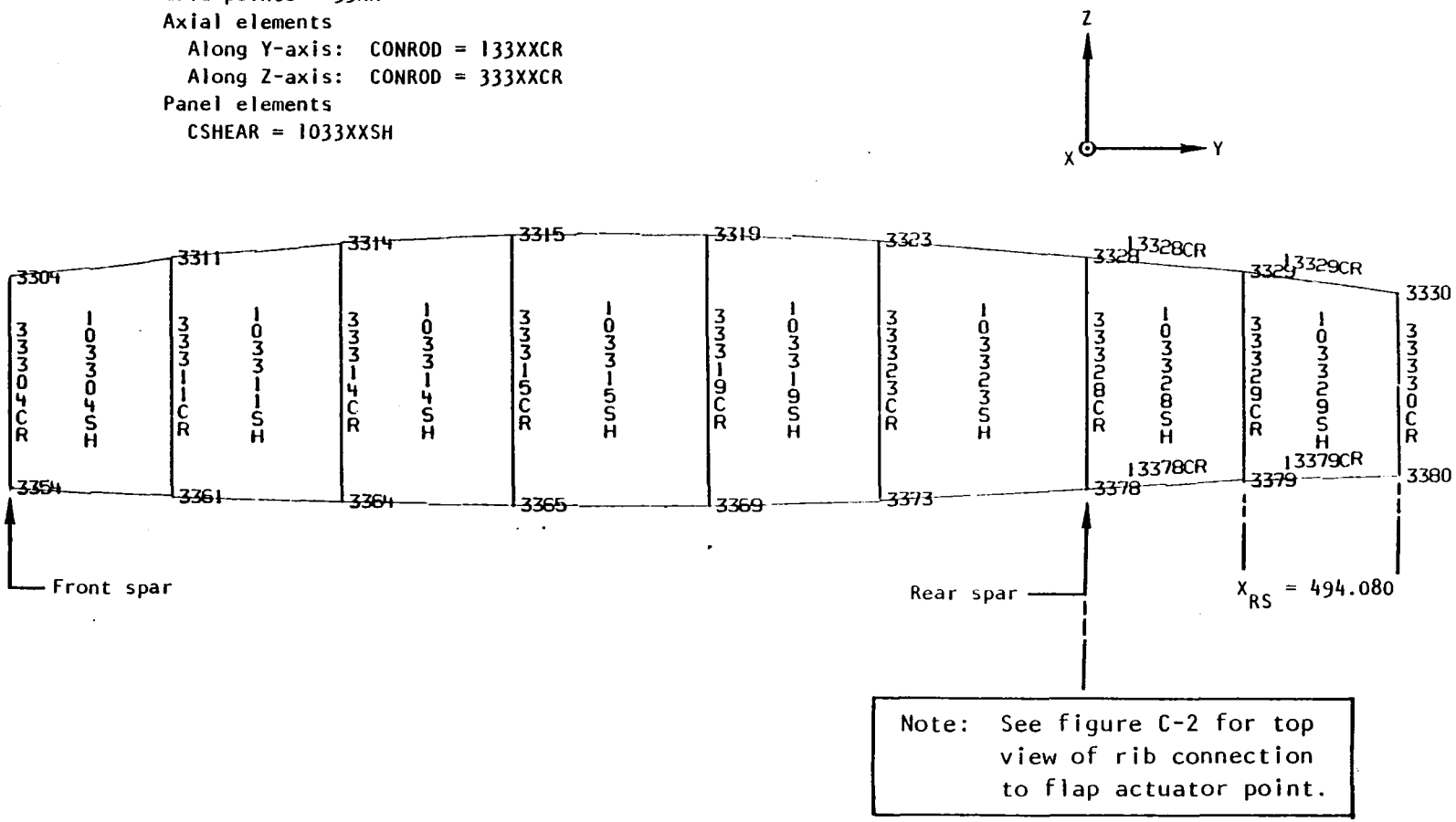


Figure C-26. - Wing rib station 482.790 (main box).

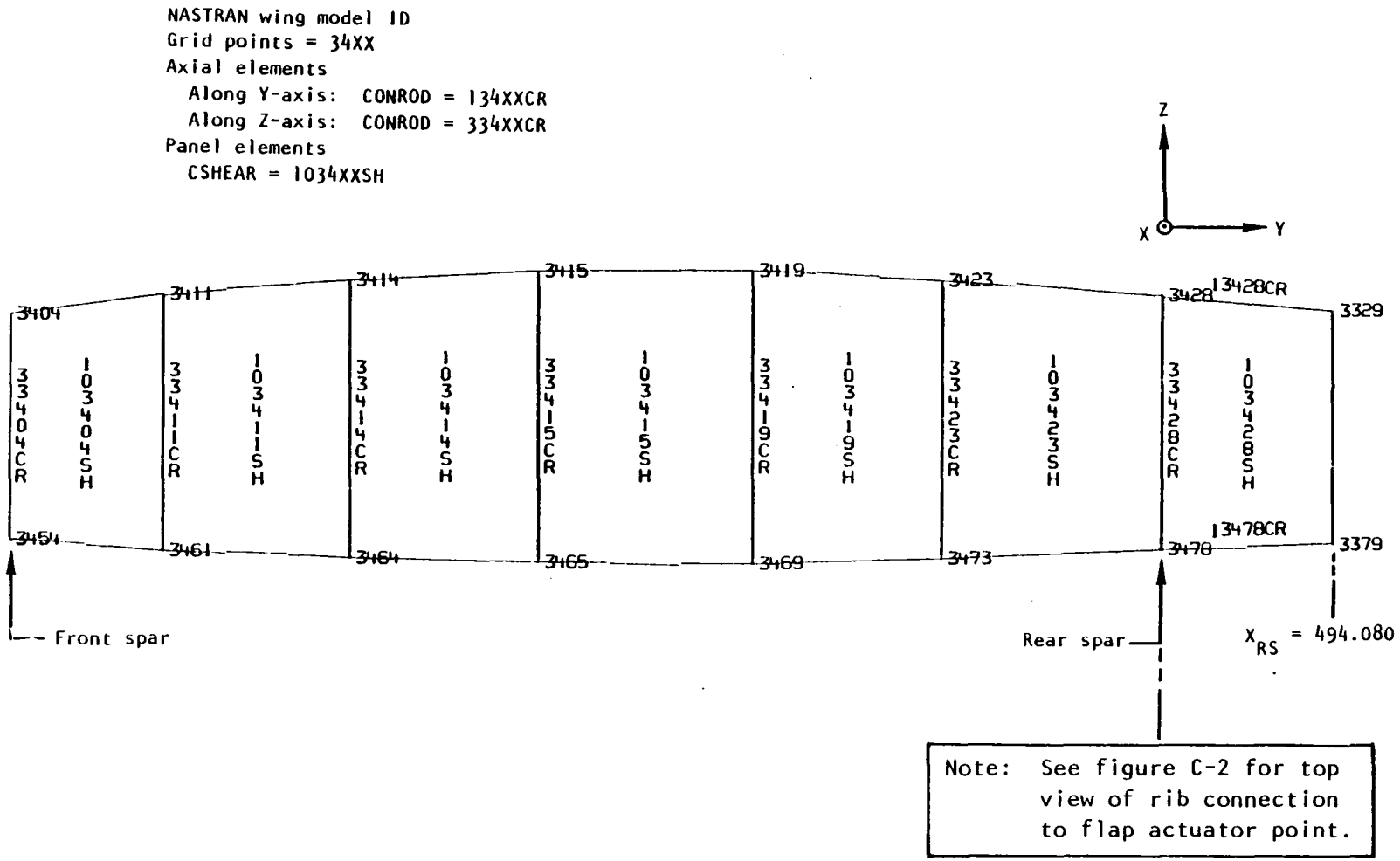


Figure C-27. - Wing rib station 506.410 (main box).

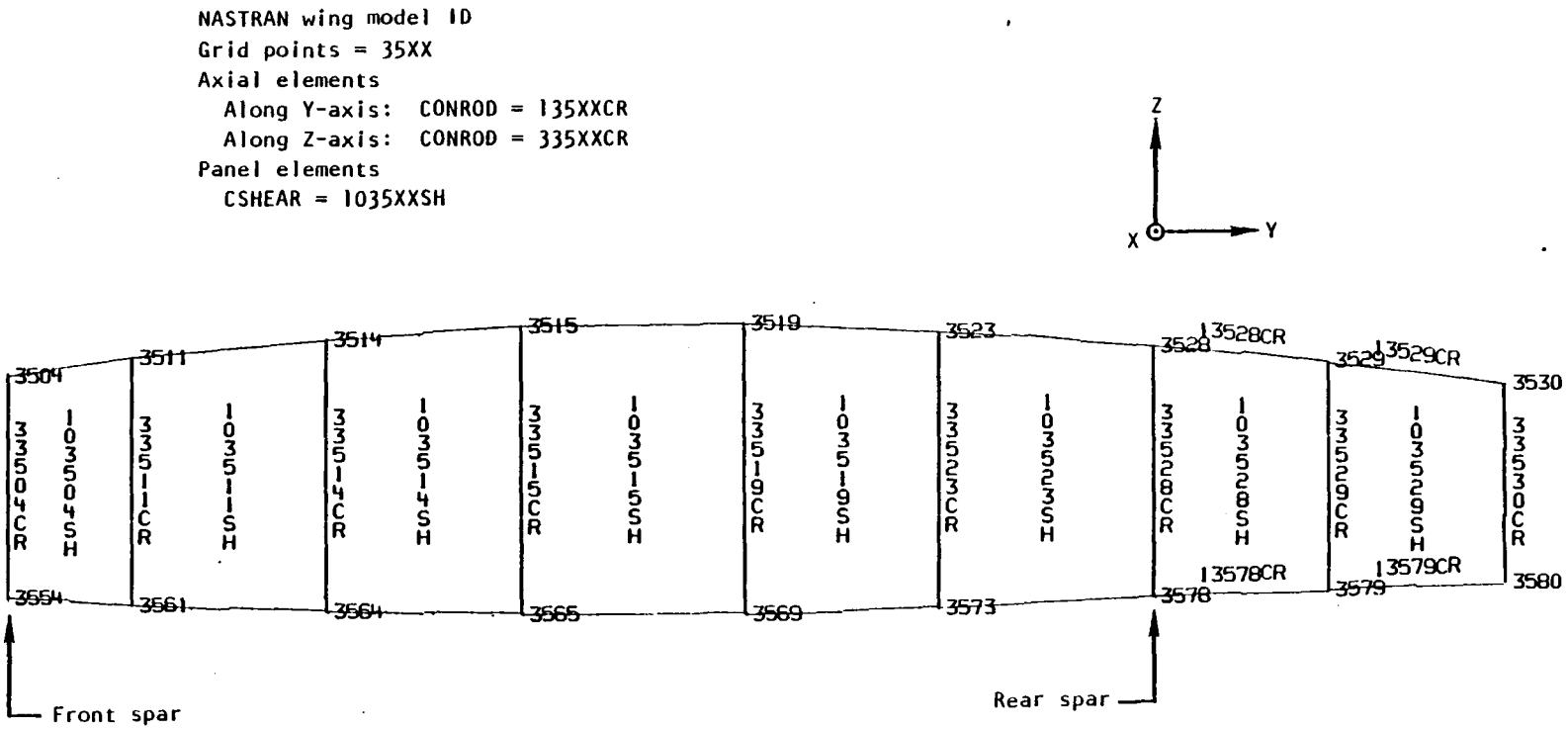


Figure C-28. - Wing rib station 530.030 (main box).

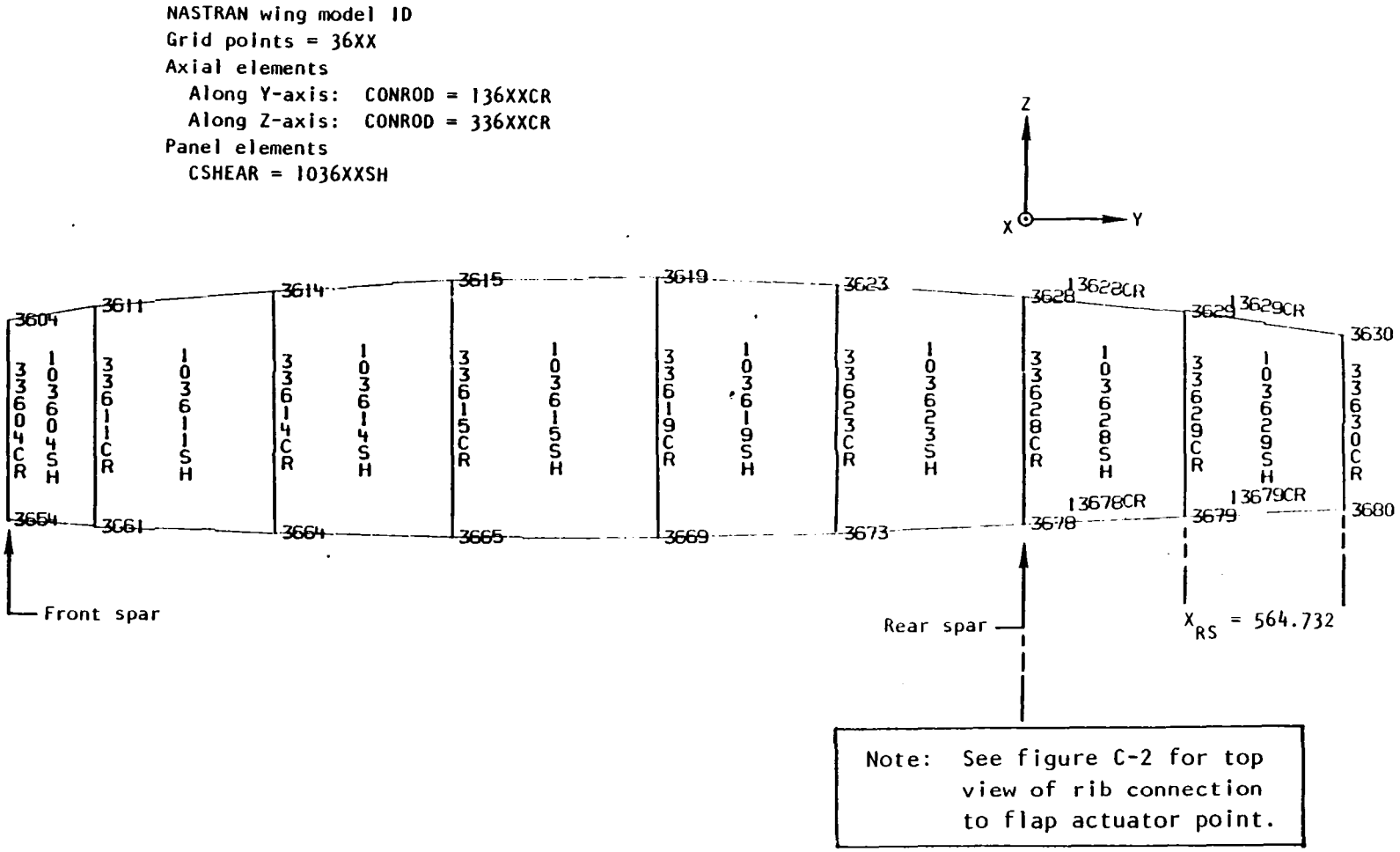


Figure C-29. - Wing rib station 553.030 (main box).

NASTRAN wing model ID
Grid points = 37XX
Axial elements
  Along Y-axis: CONROD = 137XXCR
  Along Z-axis: CONROD = 337XXCR
Panel elements
  CSHEAR = 1037XXSH

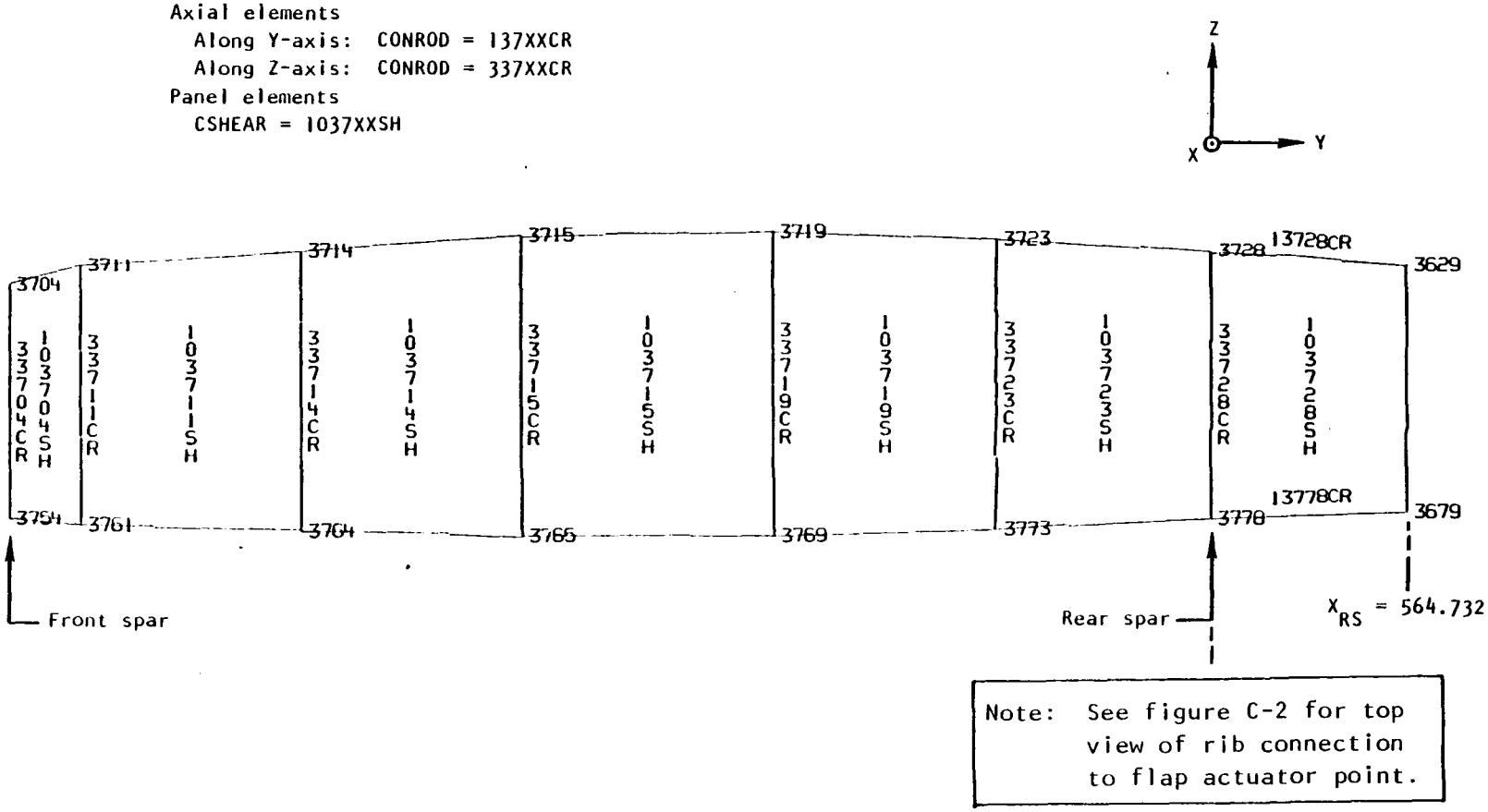


Figure C-30. - Wing rib station 576.300 (main box).

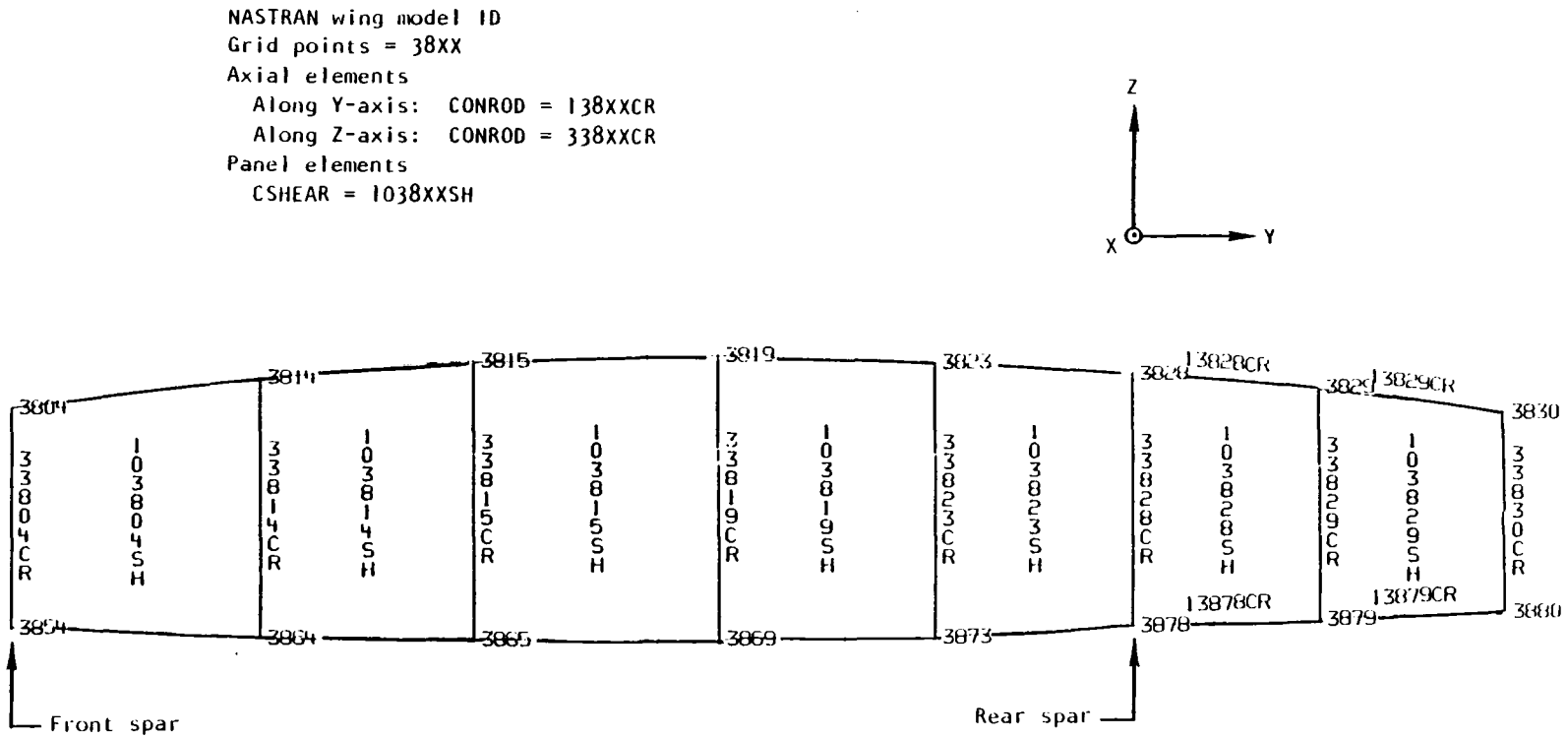


Figure C-31. - Wing rib station 599.440 (main box).

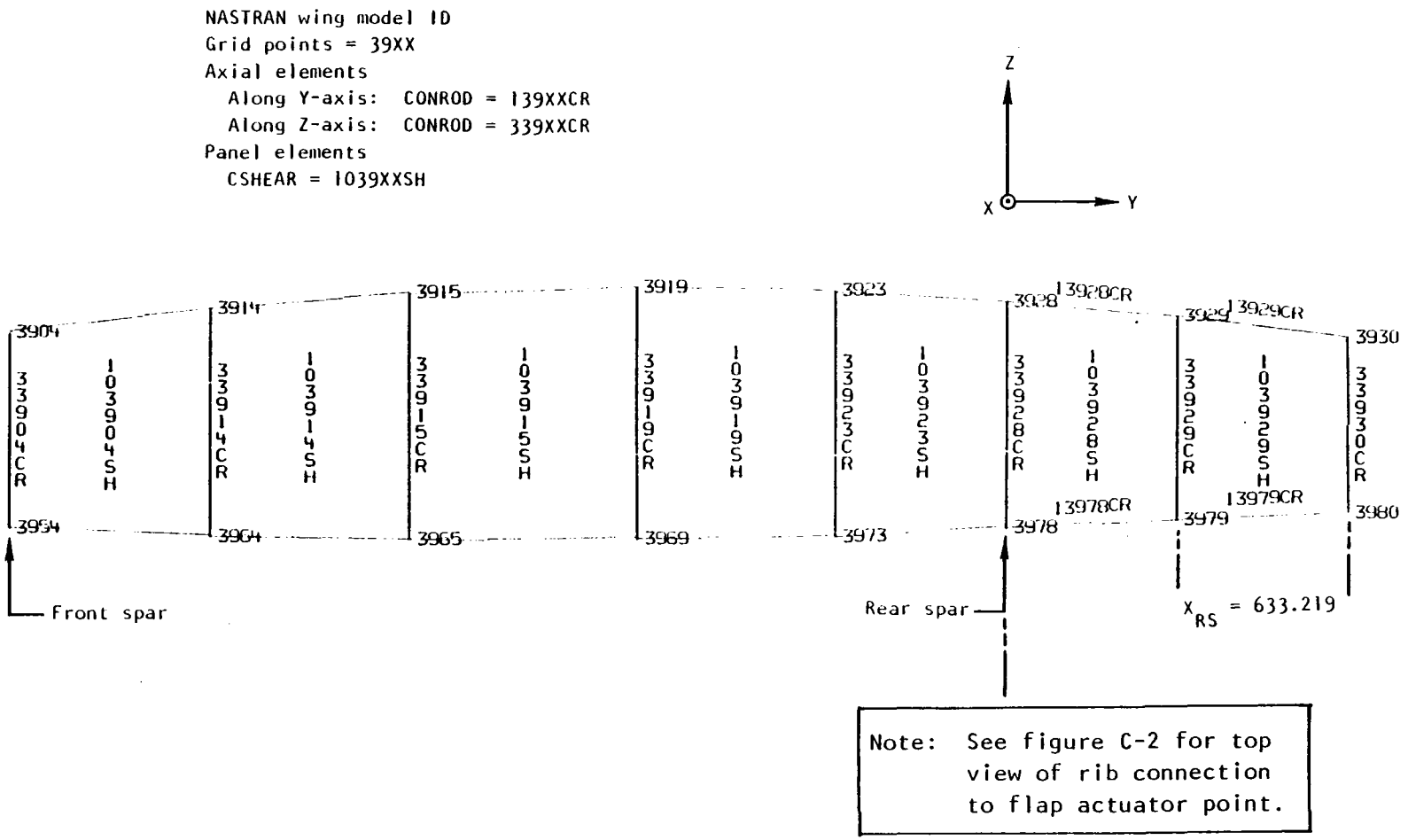


Figure C-32. - Wing rib station 620.913 (main box).

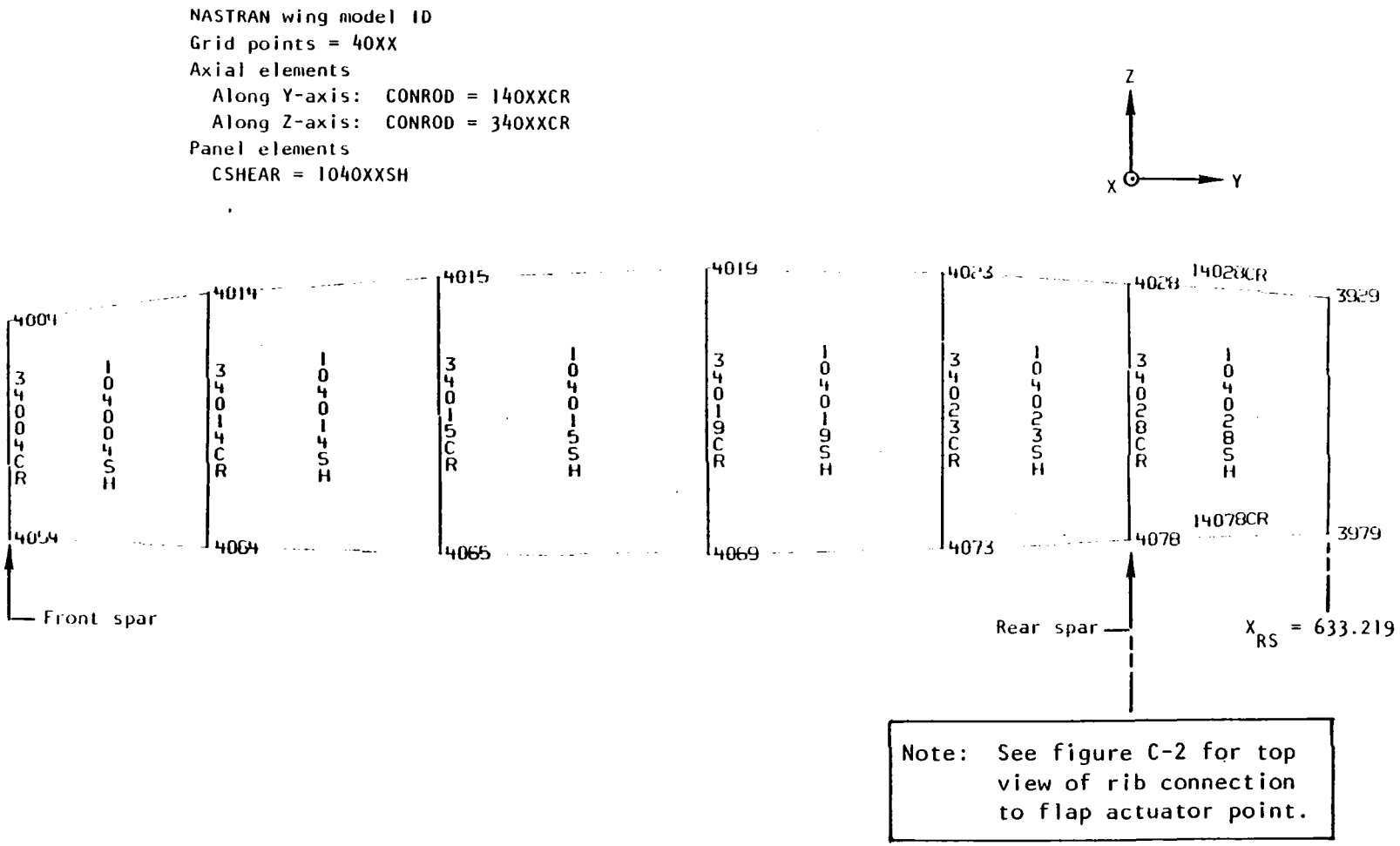


Figure C-33. - Wing rib station 644.480 (main box).

NASTRAN wing model ID
Grid points = 41XX
Axial elements
  Along Y-axis: CONROD = 141XXCR
  Along Z-axis: CONROD = 341XXCR
Panel elements
  CSHEAR = 1041XXSH

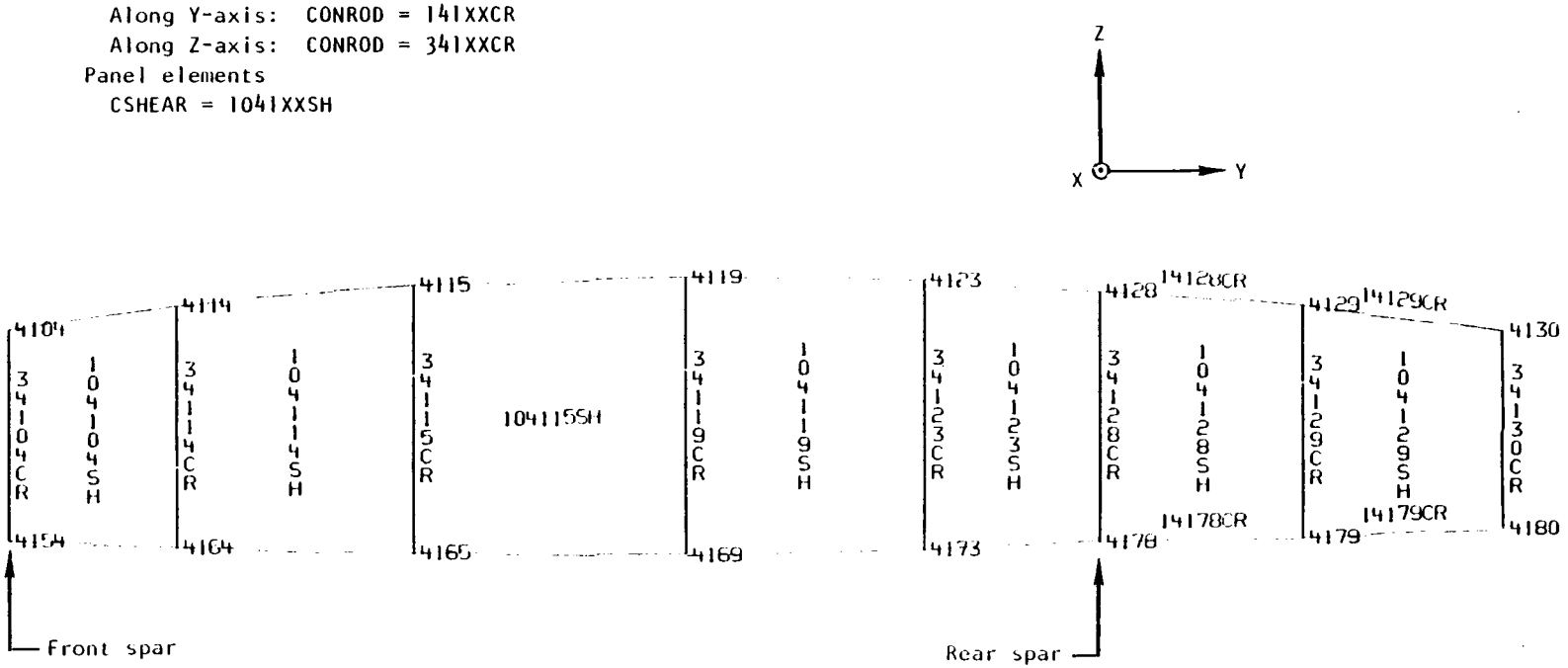


Figure C-34. - Wing rib station 667.000 (main box).

NASTRAN wing model ID
Grid points = 42XX
Axial elements
  Along Y-axis: CONROD = 142XXCR
  Along Z-axis: CONROD = 342XXCR
Panel elements
  CSHEAR = 1042XXSH

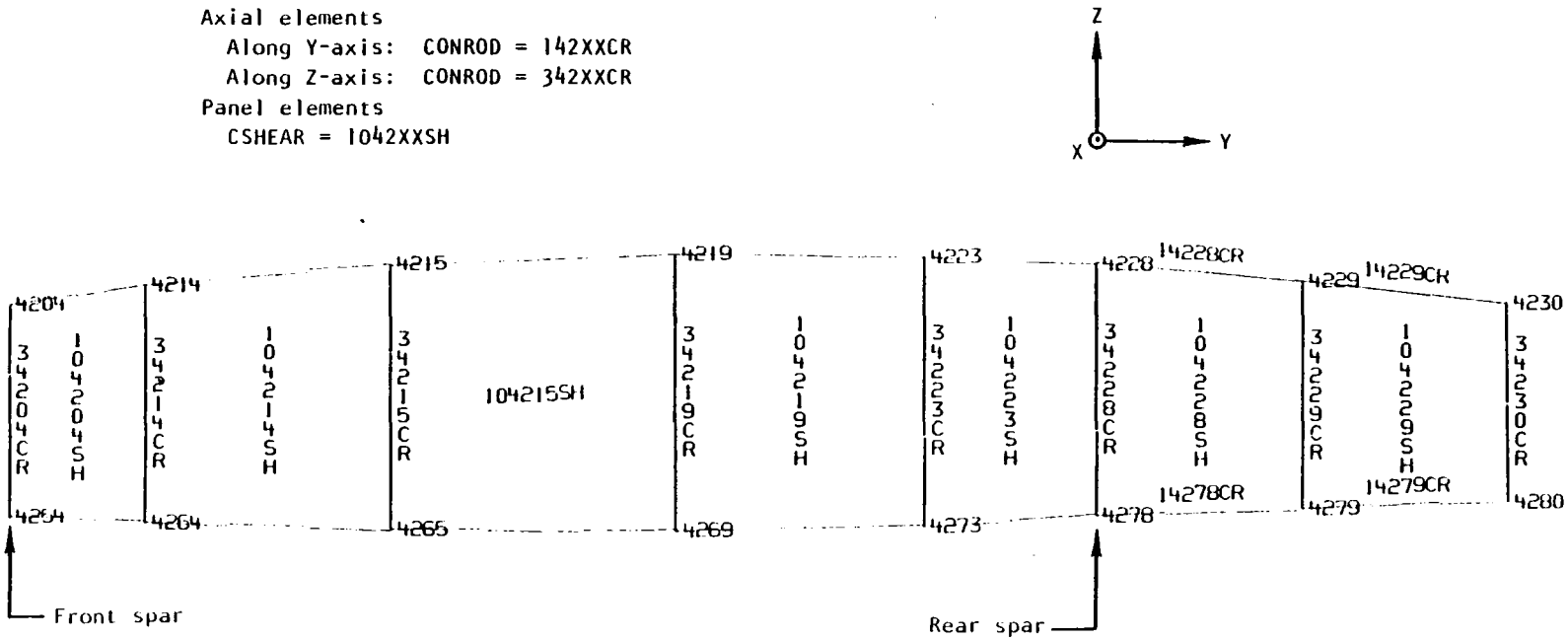


Figure C-35. - Wing rib station 689.000 (main box).

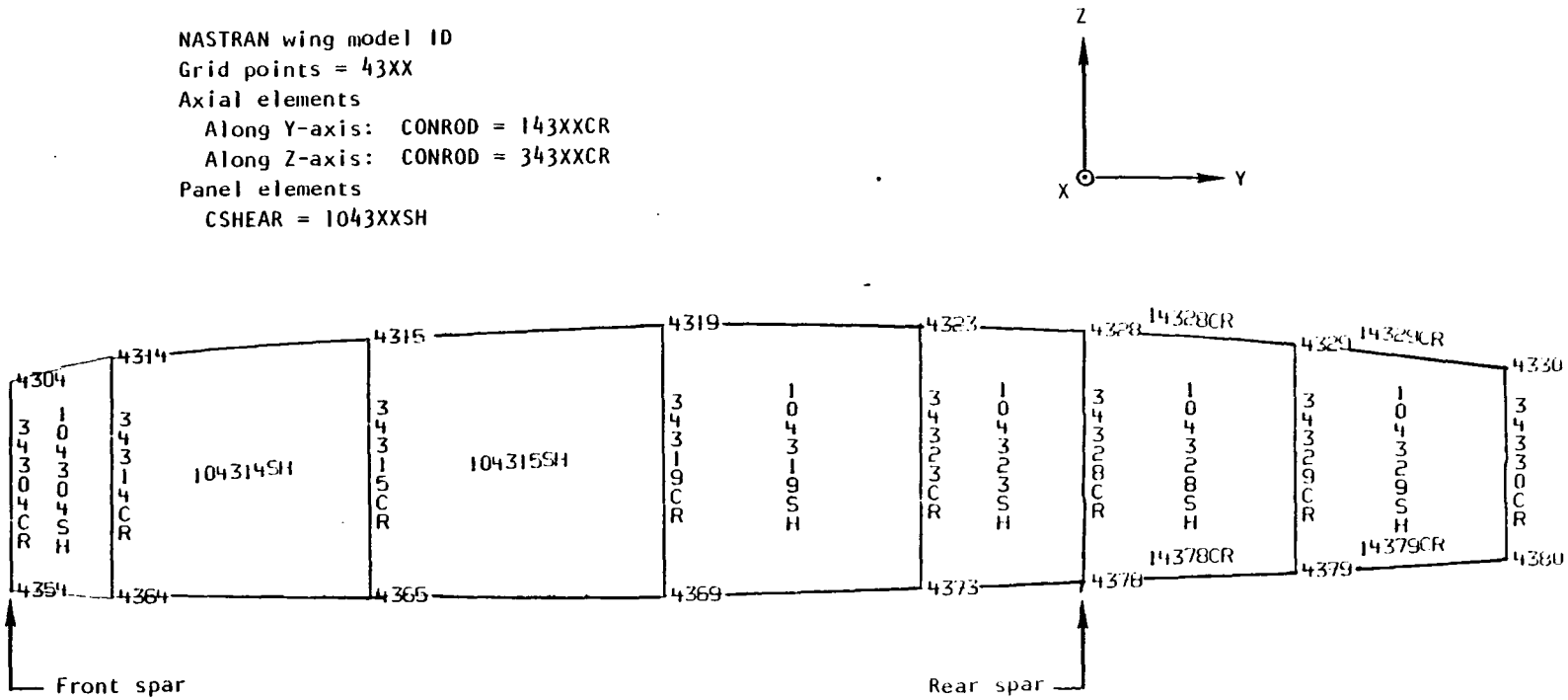


Figure C-36. - Wing rib station 711.000 (main box).

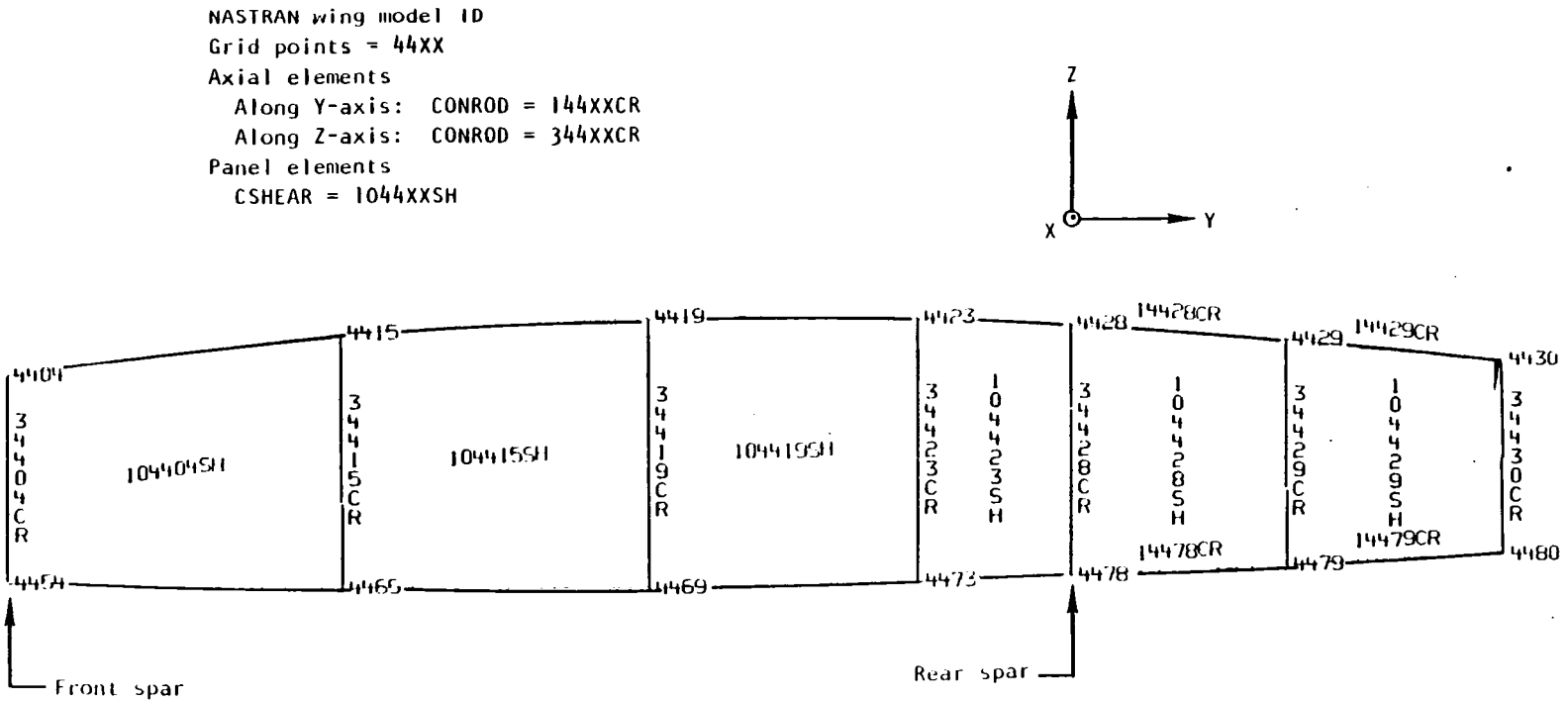


Figure C-37. - Wing rib station 733.000 (main box).

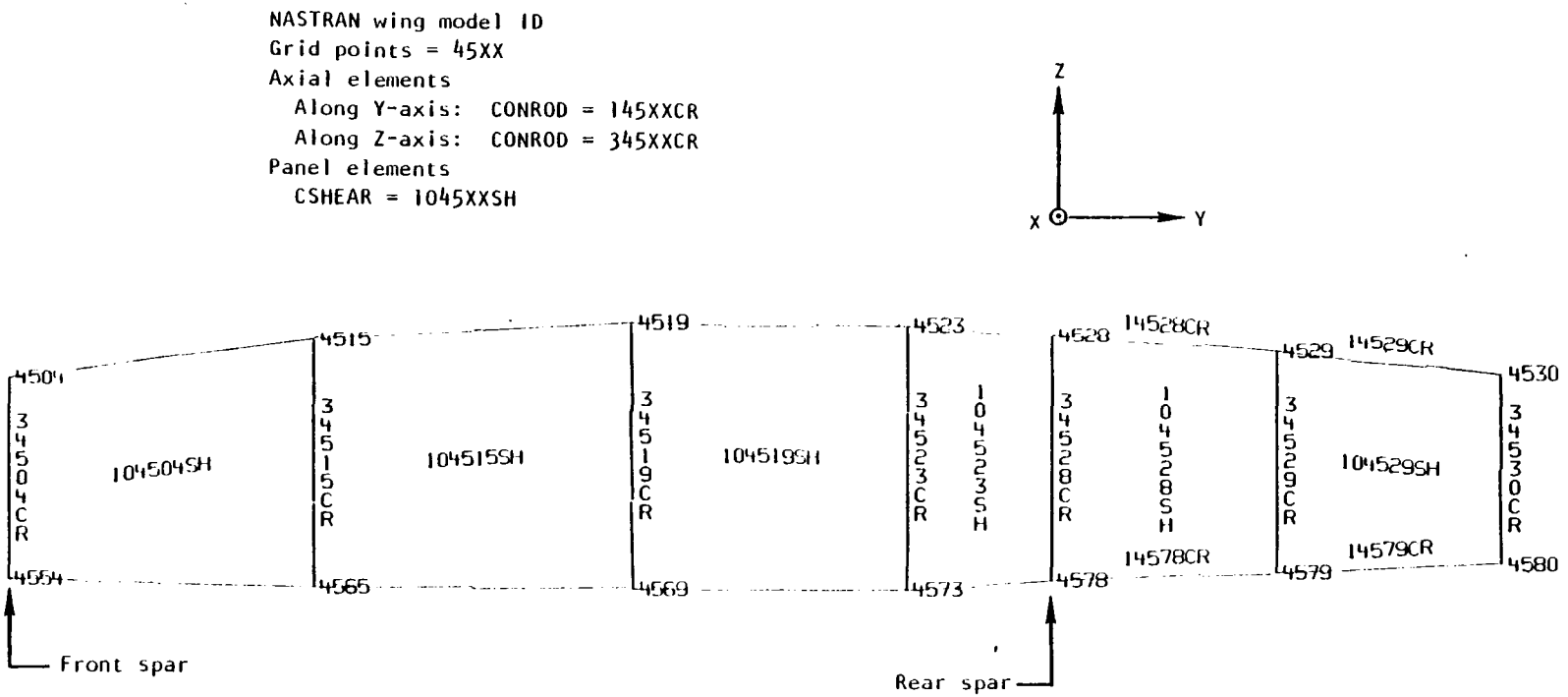


Figure C-38. - Wing rib station 755.000 (main box).

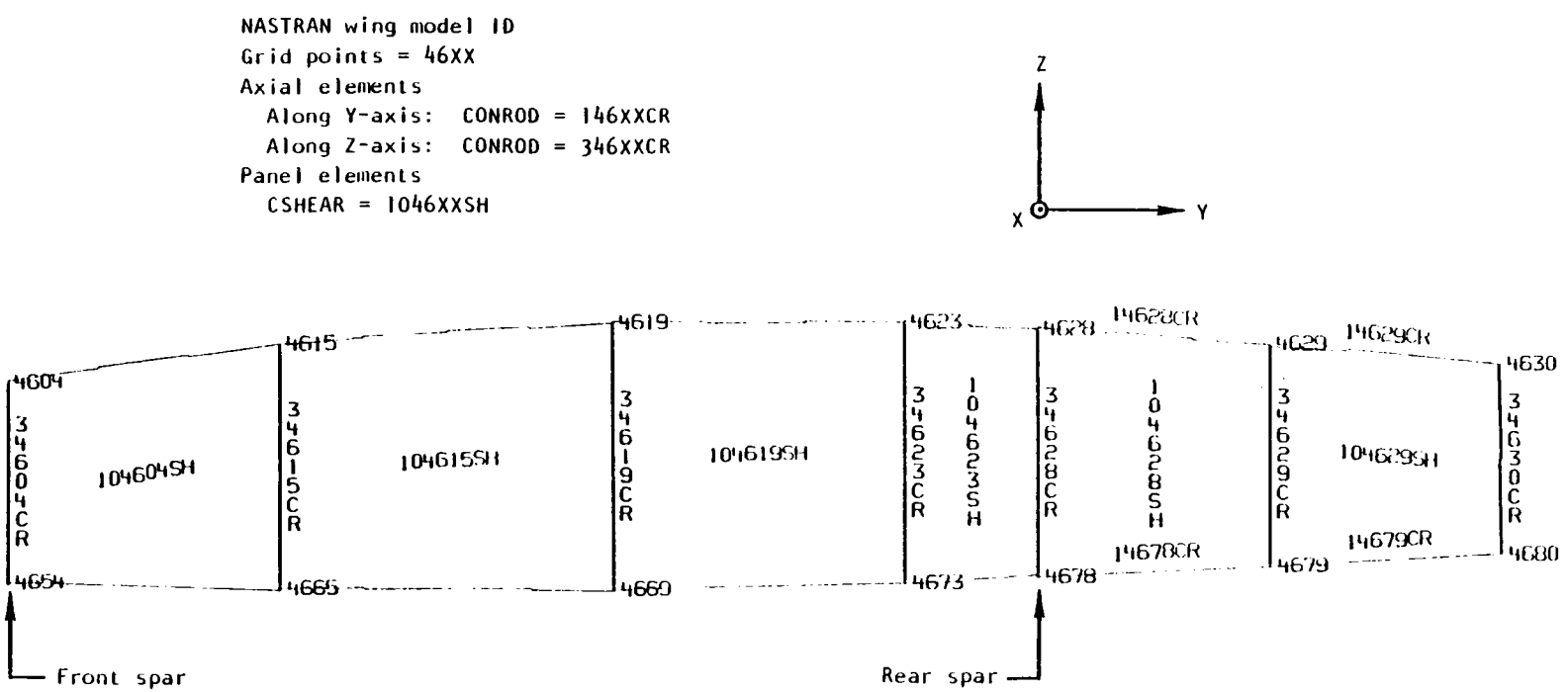


Figure C-39. - Wing rib station 777.000 (main box).

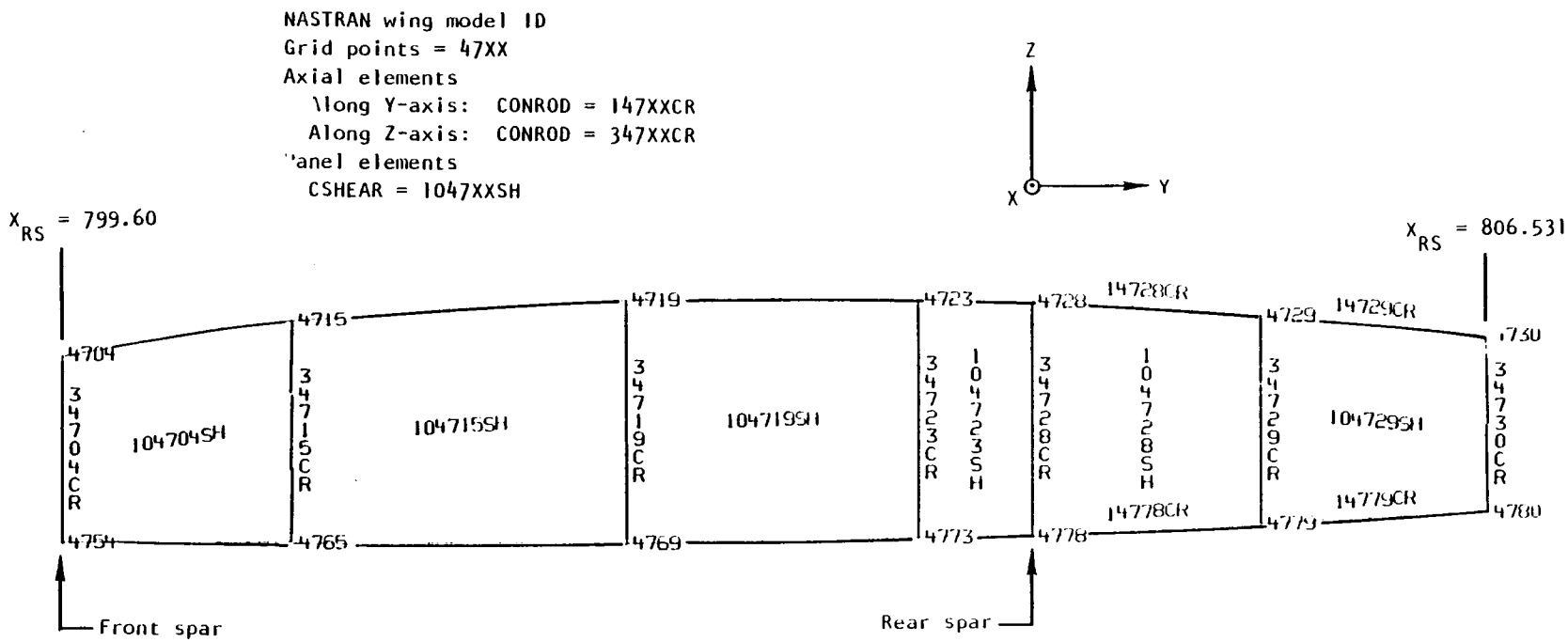


Figure C-40. - Wing rib station 799.660 to 806.531 canted (main box).

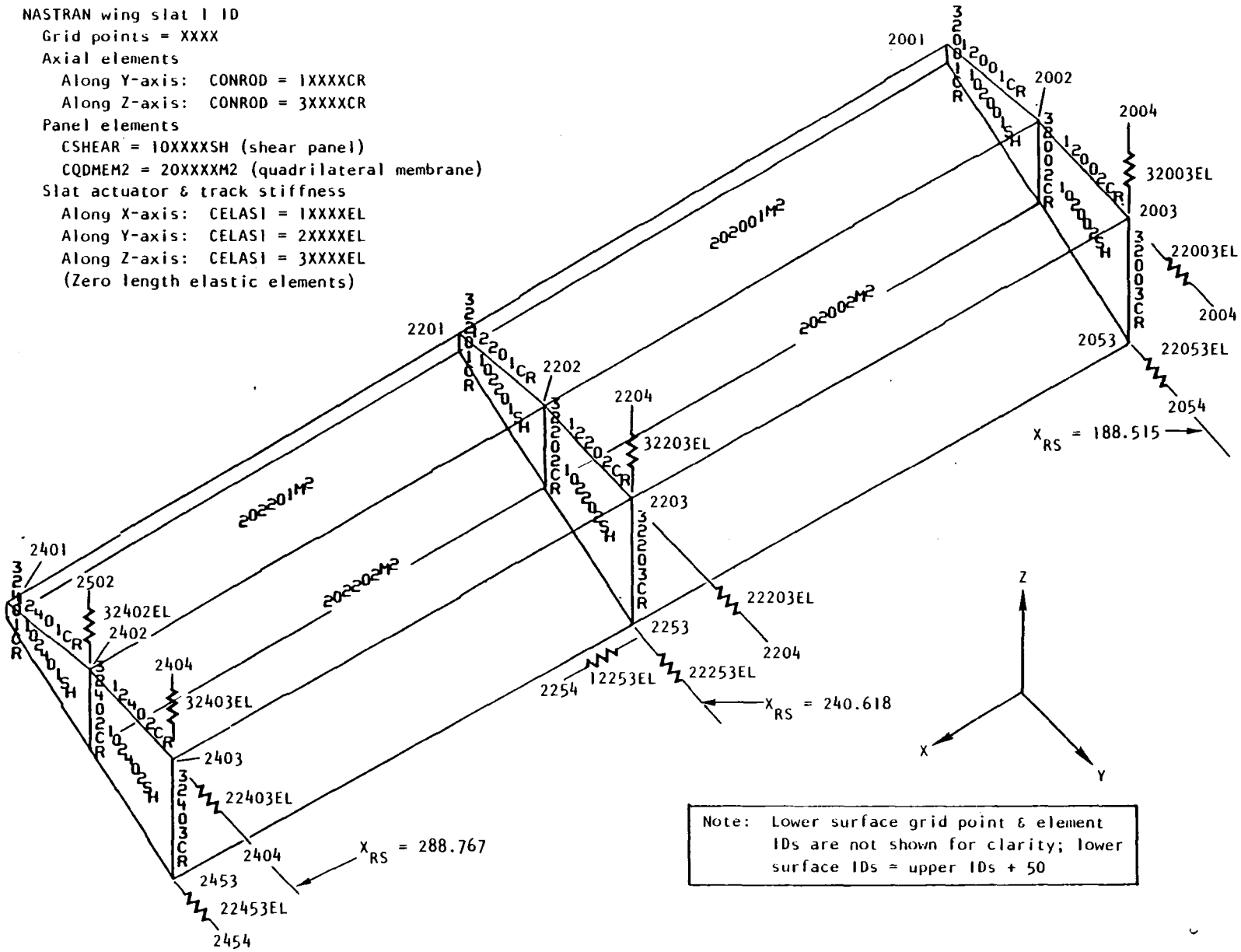


Figure C-41. - Wing slat 1 (NASTRAN model).

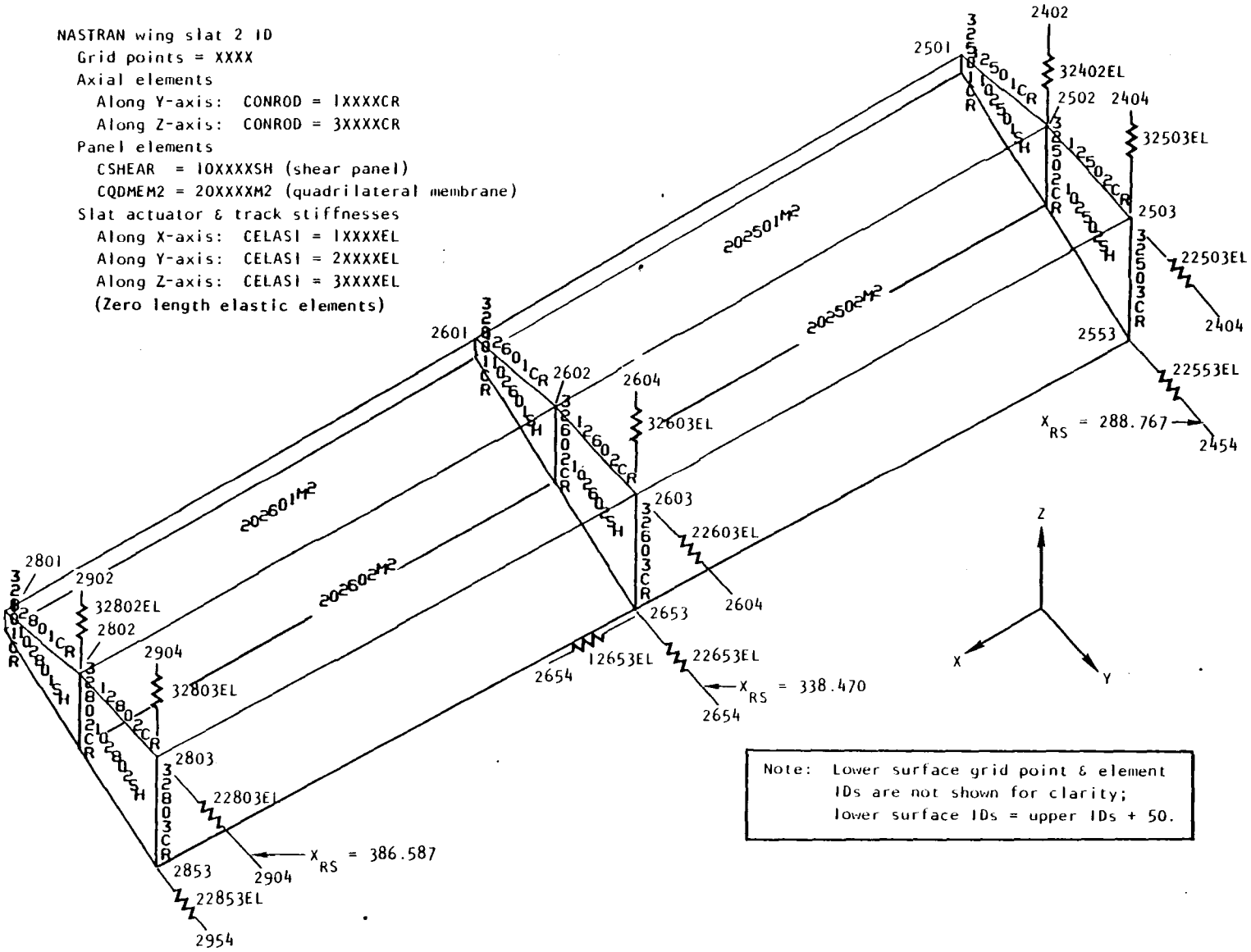


Figure C-42. - Wing slat 2 (NASTRAN model).

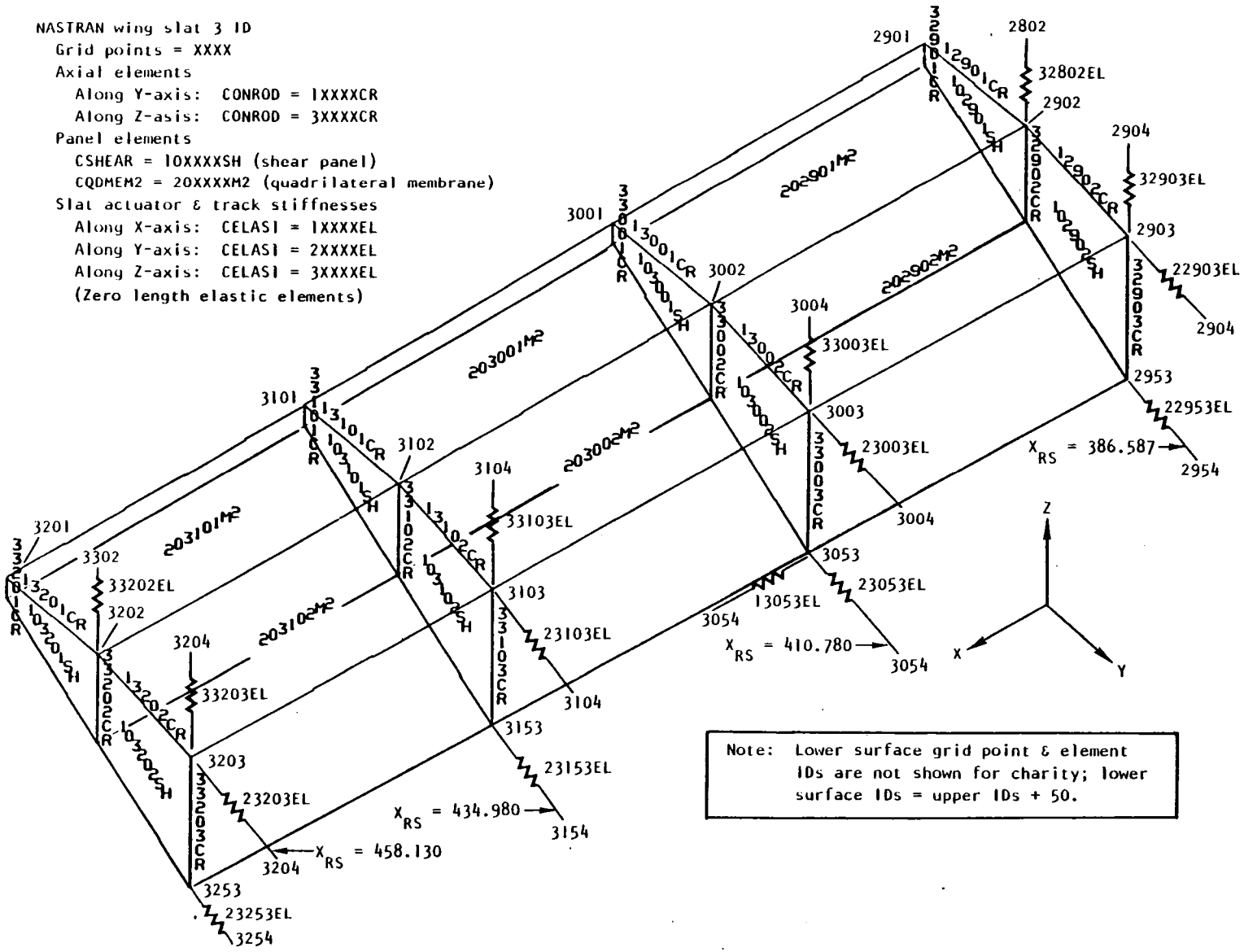


Figure C-43. - Wing slat 3 (NASTRAN model).

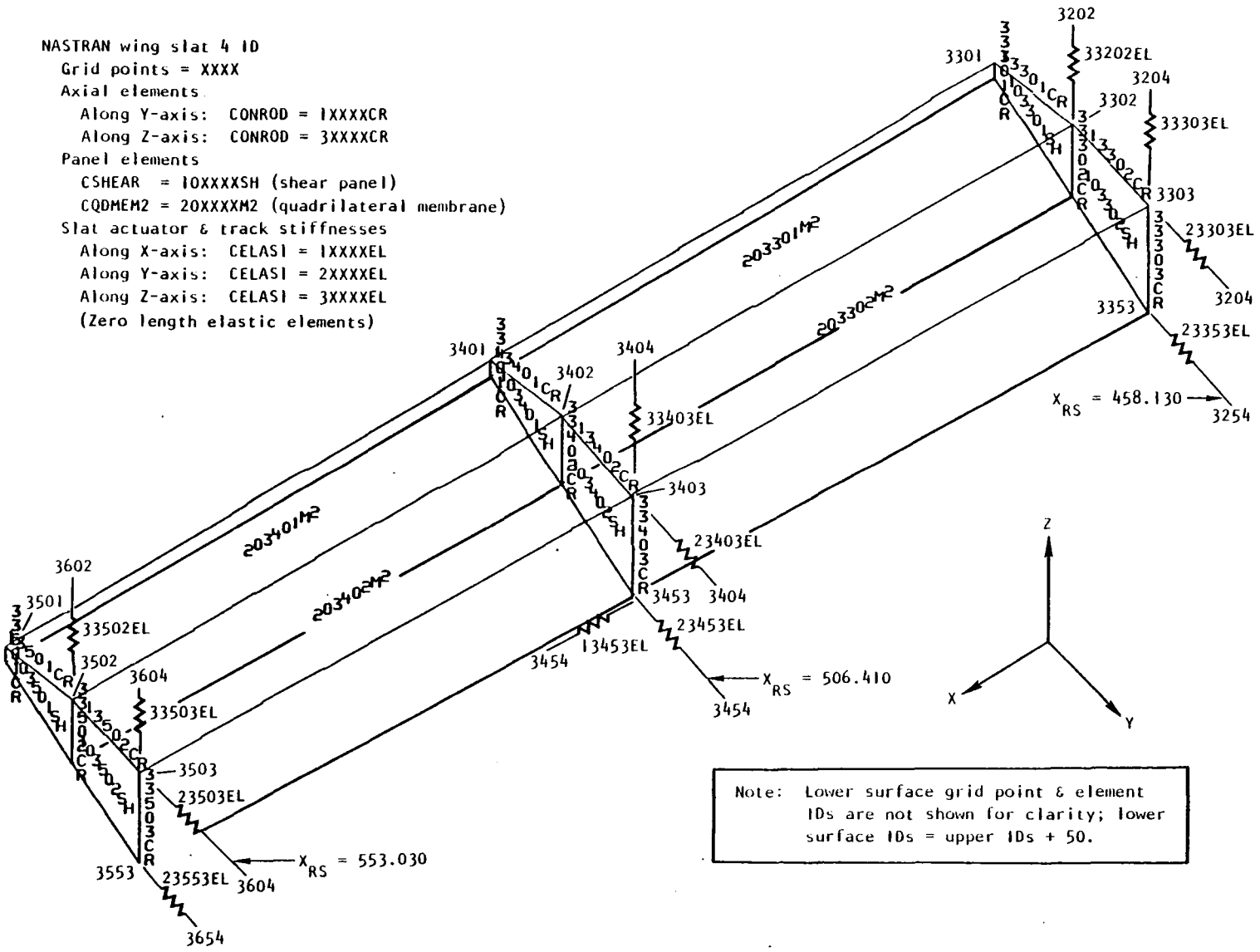


Figure C-44. - Wing slat 4 (NASTRAN model).

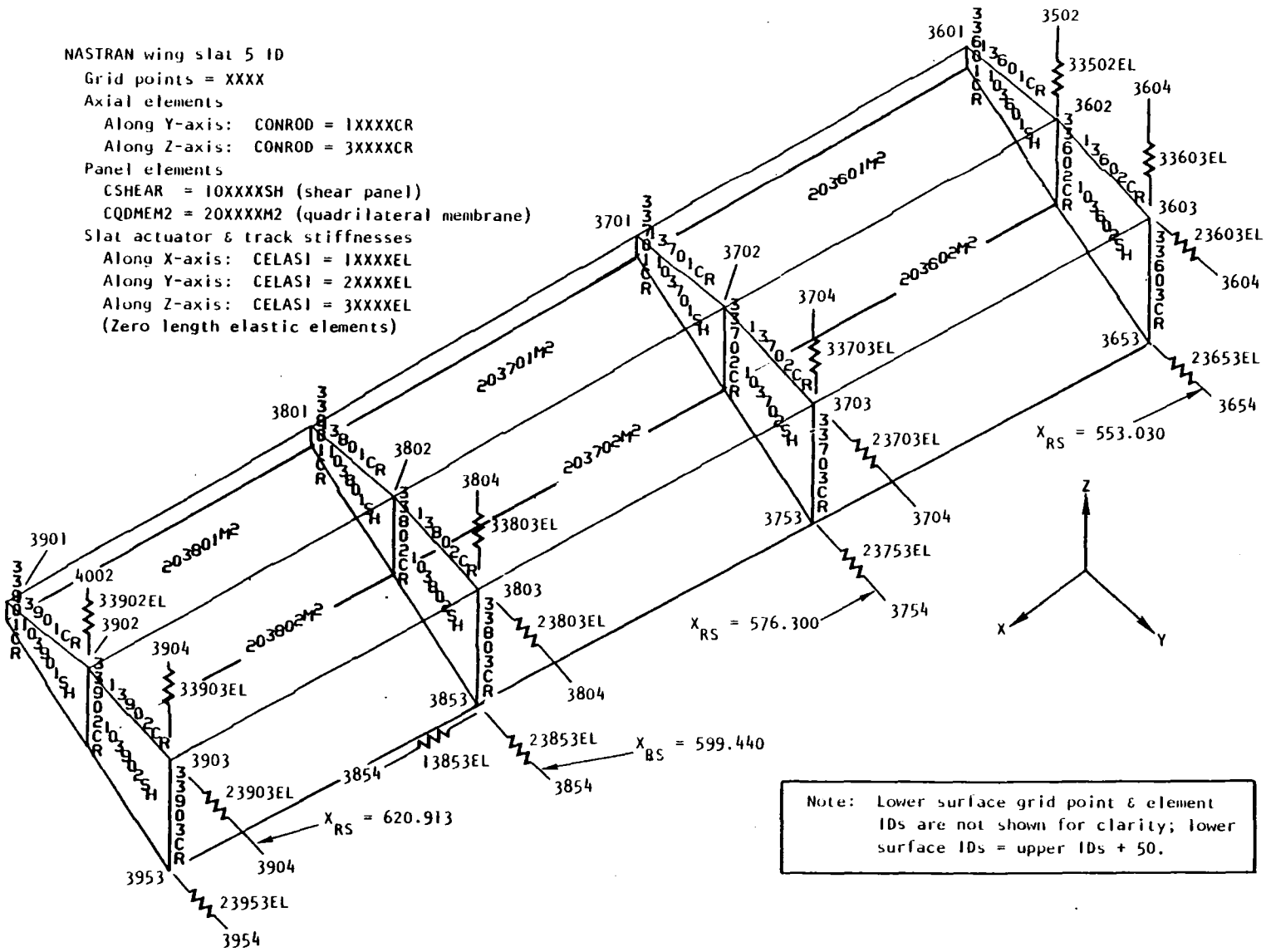


Figure C-45. - Wing slat 5 (NASTRAN model).

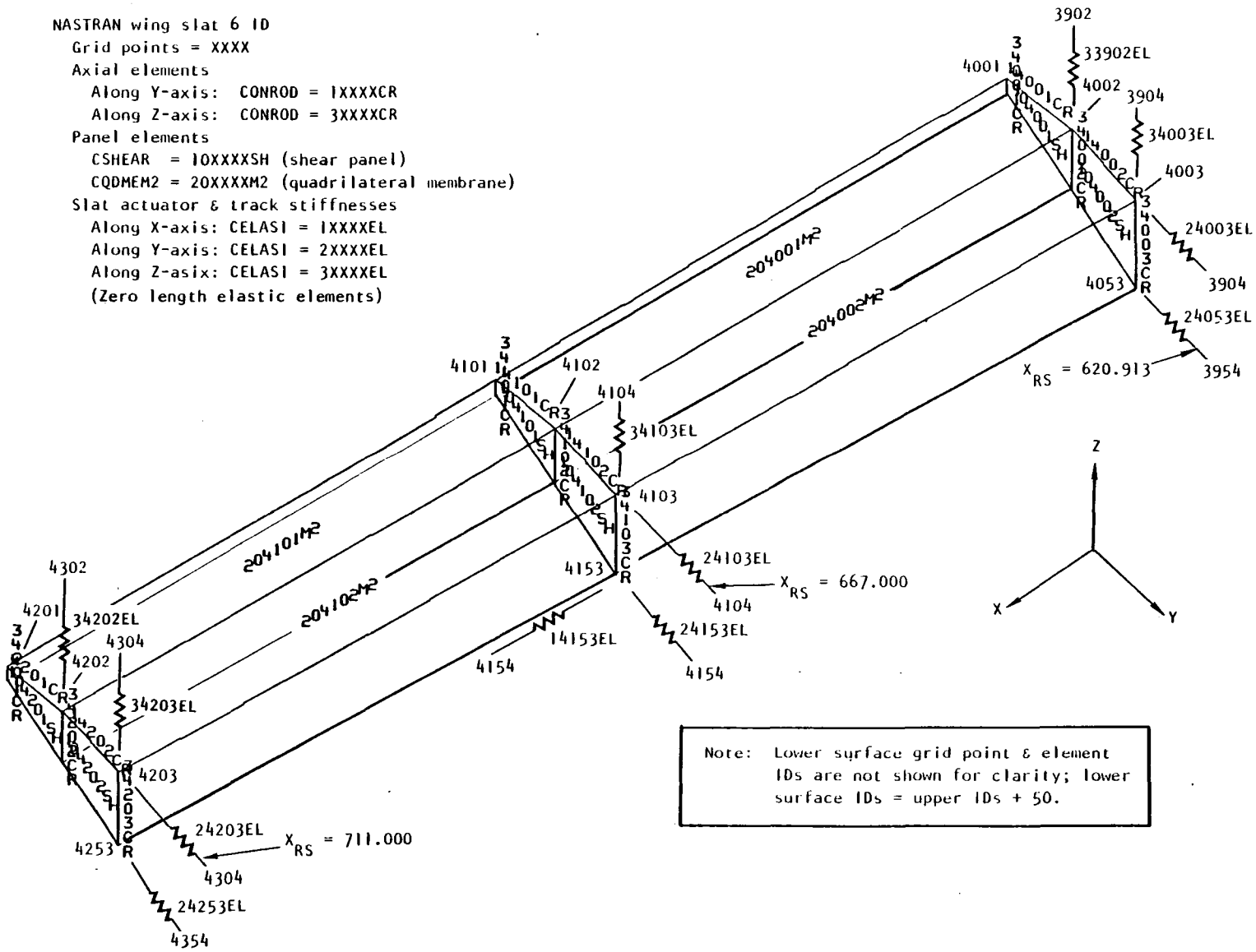


Figure C-46. - Wing slat 6 (NASTRAN model).

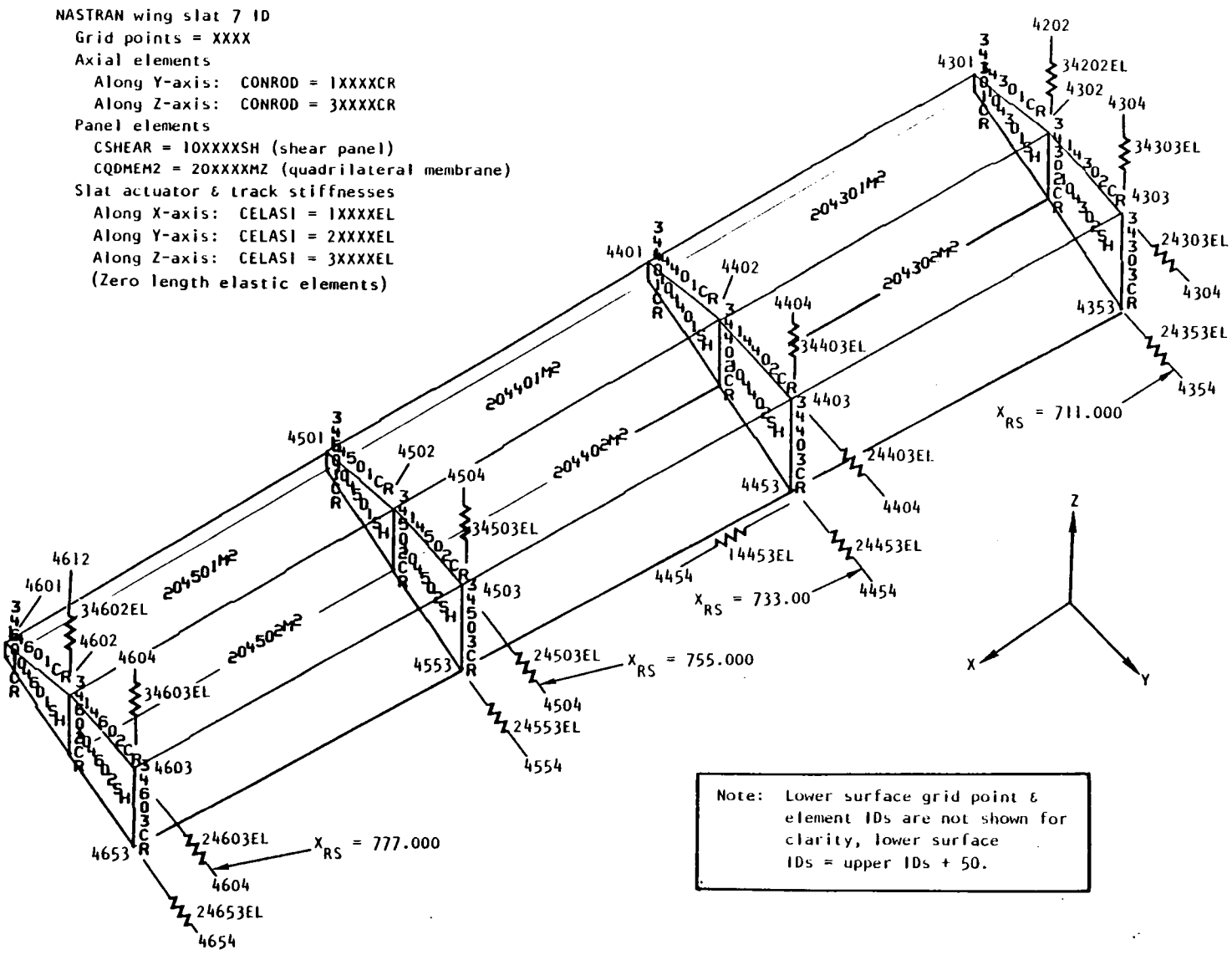


Figure C-47. - Wing slat 7 (NASTRAN model).

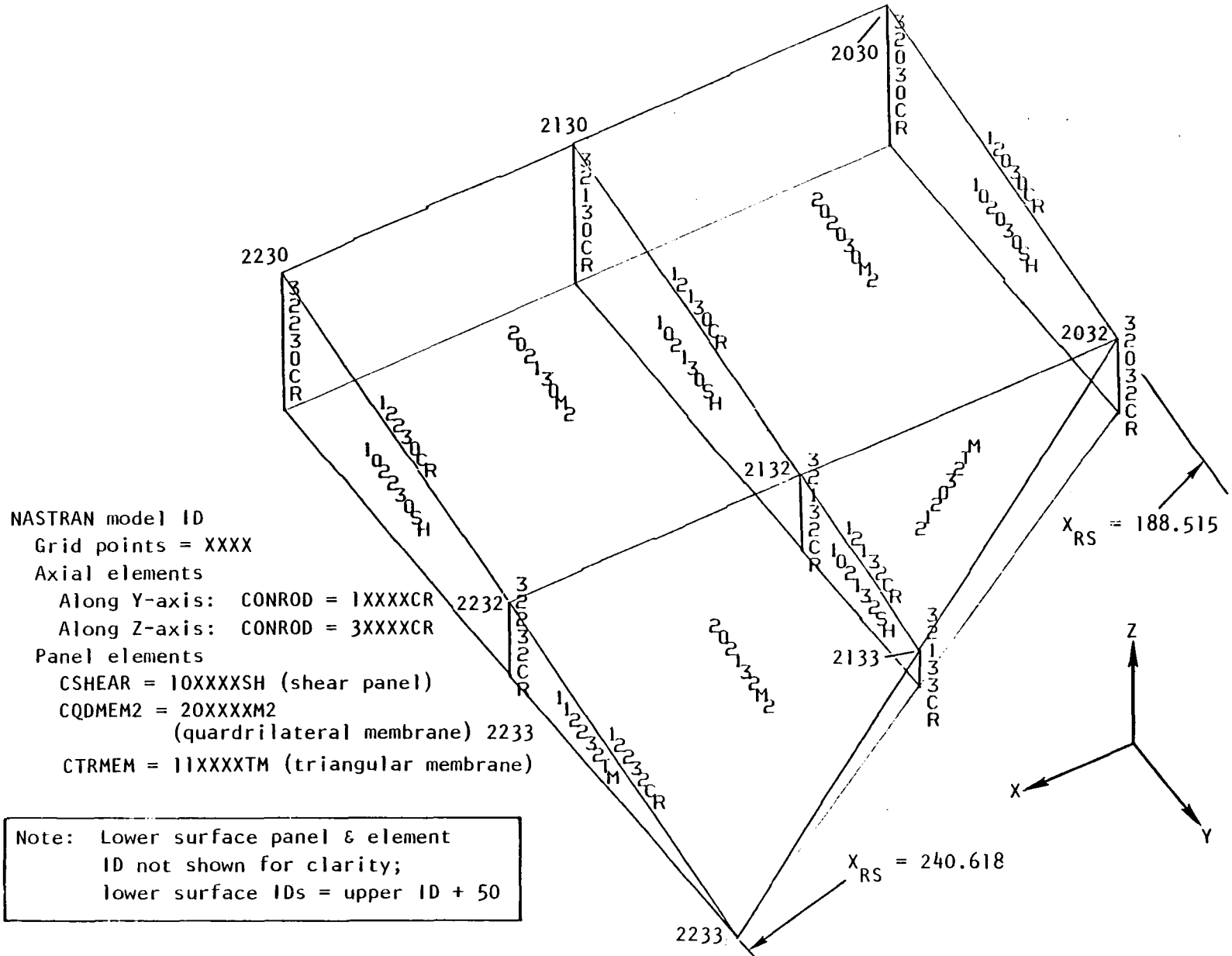


Figure C-48. - Wing trailing edge region inboard of flaps (NASTRAN model).

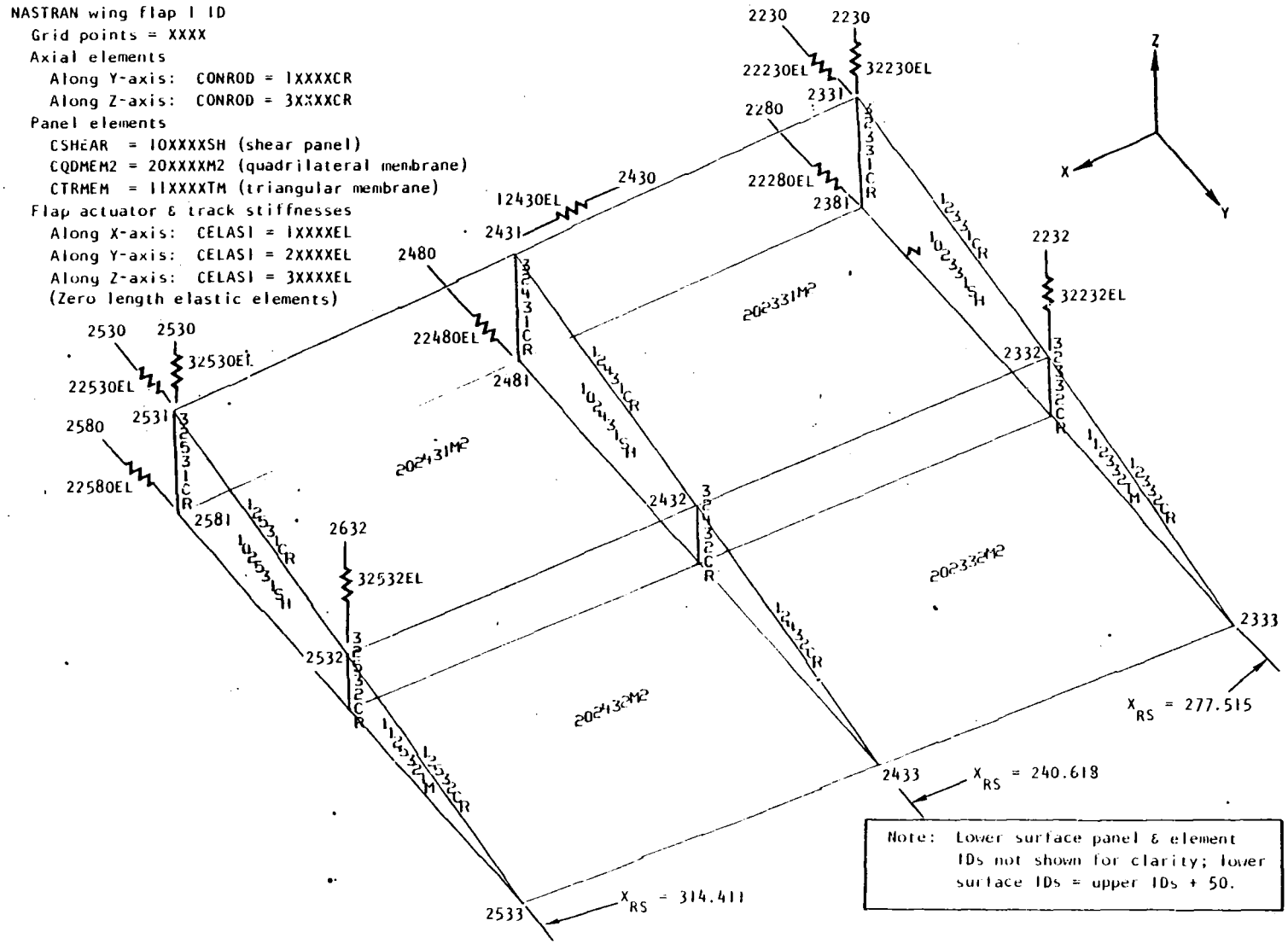


Figure C-49. - Wing flap 1 (NASTRAN model).

NASTRAN wing flap 2 ID
- Grid points = XXXX
- Axial elements
  - Along Y-axis: CONROD = 1XXXXCR
  - Along Z-axis: CONROD = 3XXXXCR
- Panel elements
  - CSHEAR = 10XXXXSH (shear panel)
  - CQDMEM2 = 20XXXXQ2 (quadrilateral membrane)
  - CTRMEM = 11XXXXTM (triangular membrane)
- Flap actuator & track stiffnesses
  - Along X-axis: CELAS1 = 1XXXXEL
  - Along Y-axis: CELAS1 = 2XXXXEL
  - Along Z-axis: CELAS1 = 3XXXXEL
  - (Zero length elastic elements)

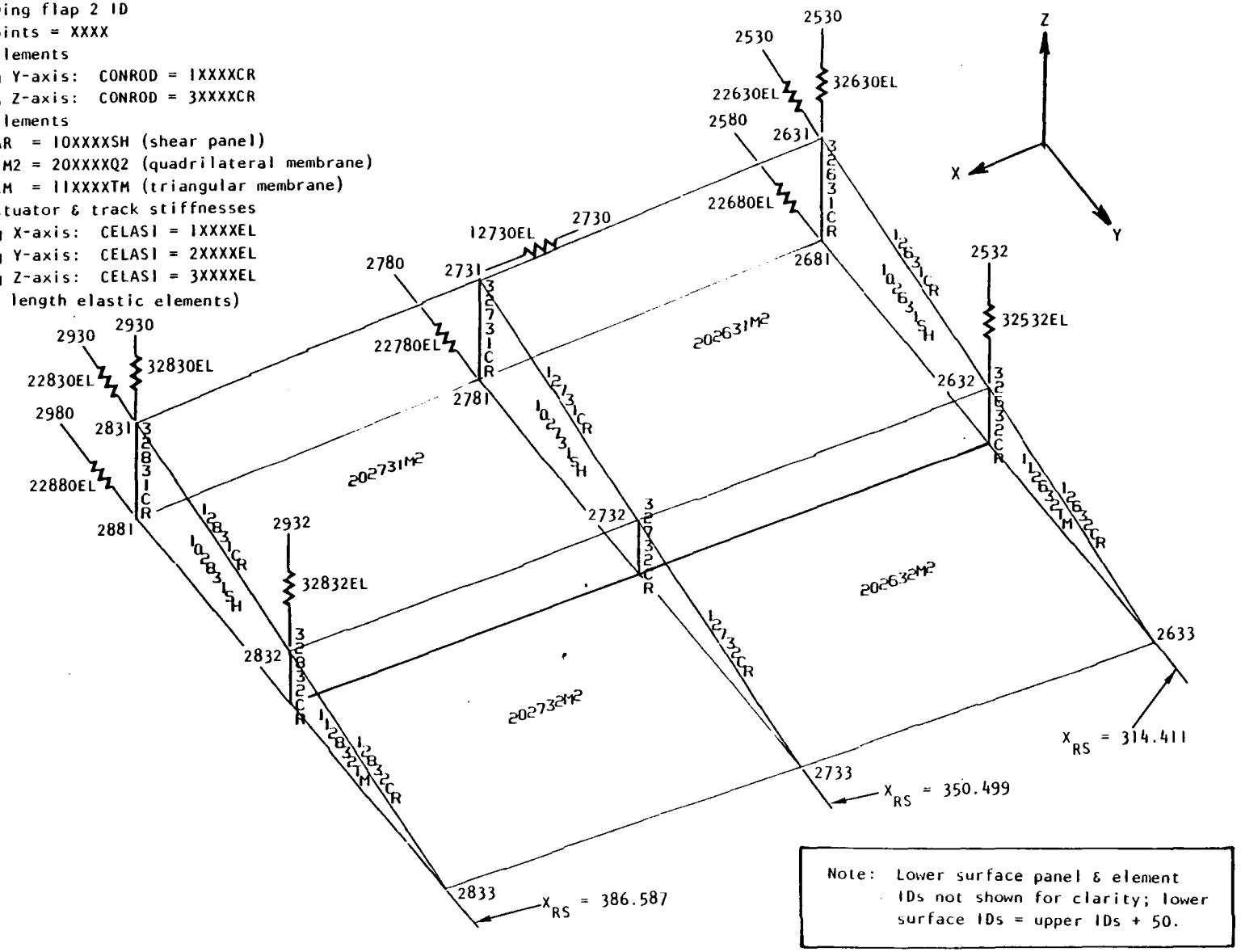


Figure C-50. - Wing flap 2 (NASTRAN model).

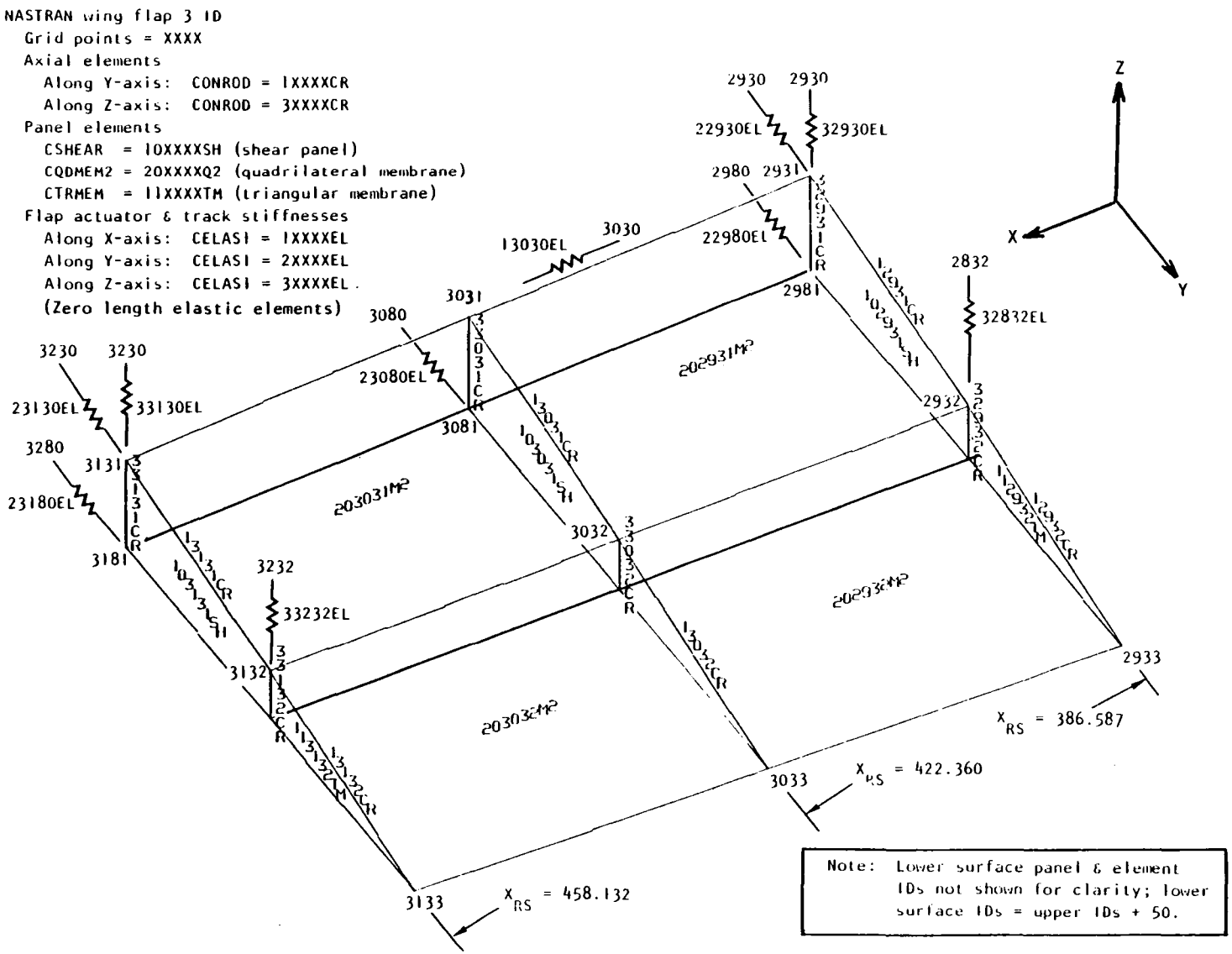


Figure C-51. - Wing flap 3 (NASTRAN model).

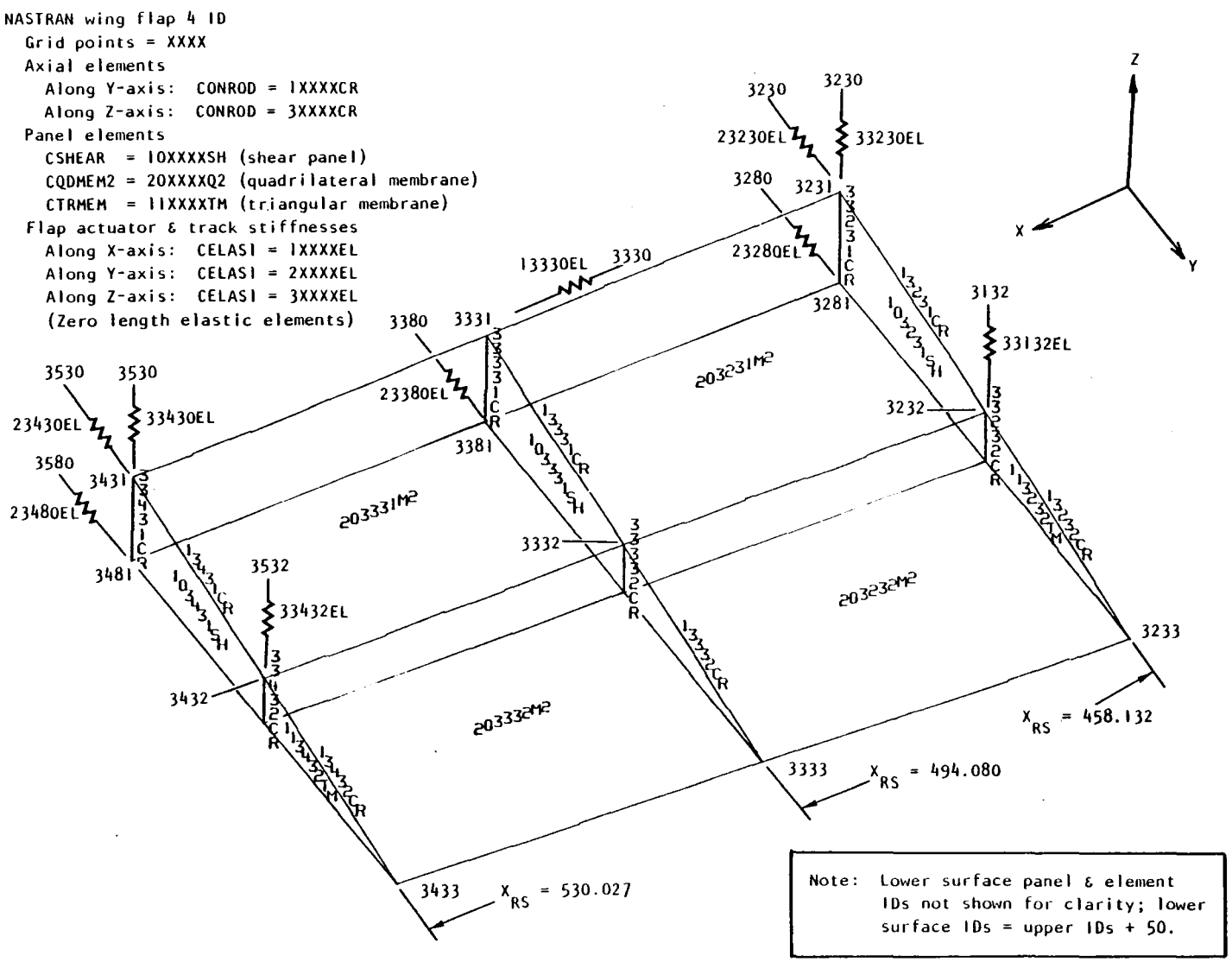


Figure C-52. - Wing flap 4 (NASTRAN model).

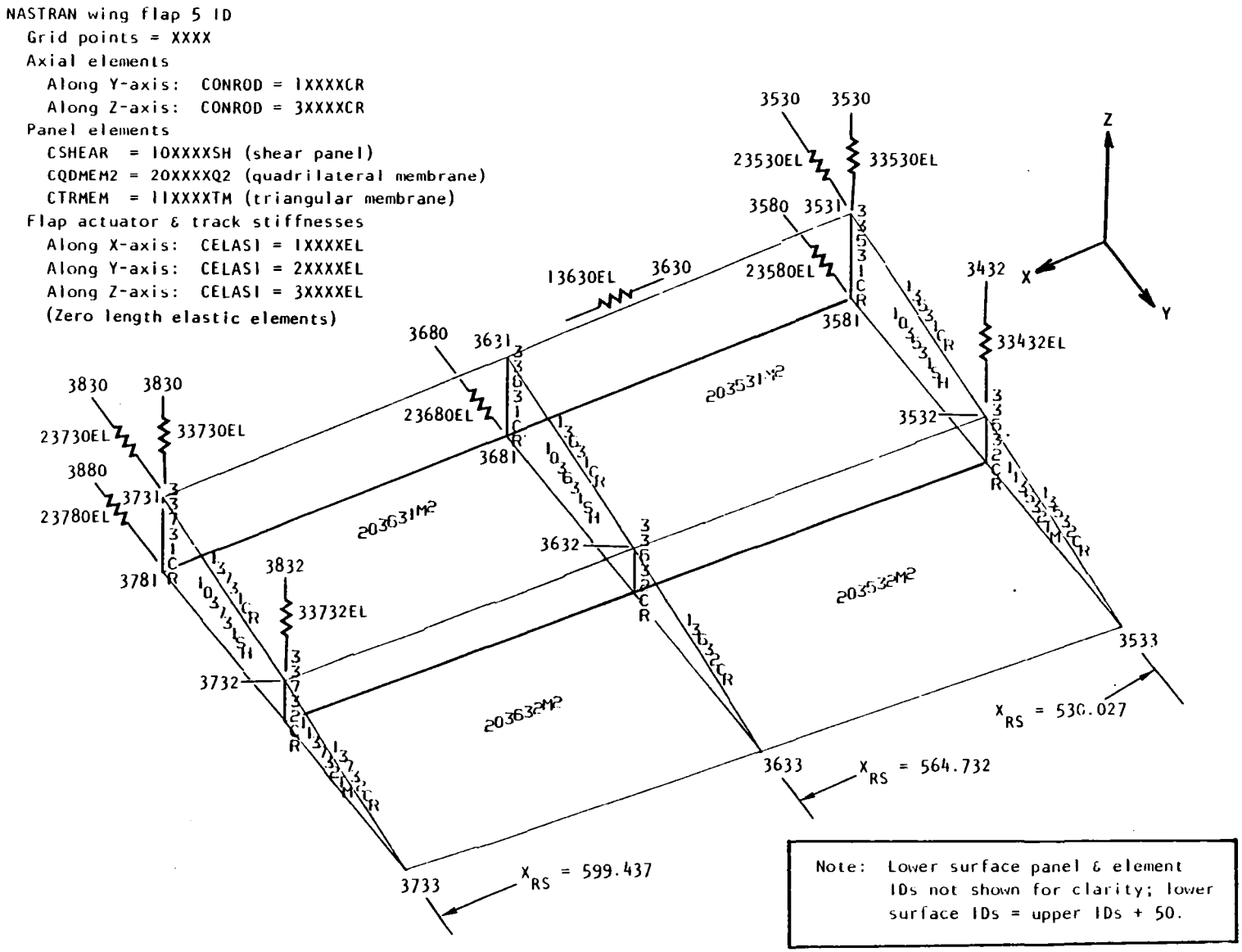


Figure C-53. - Wing flap 5 (NASTRAN model).

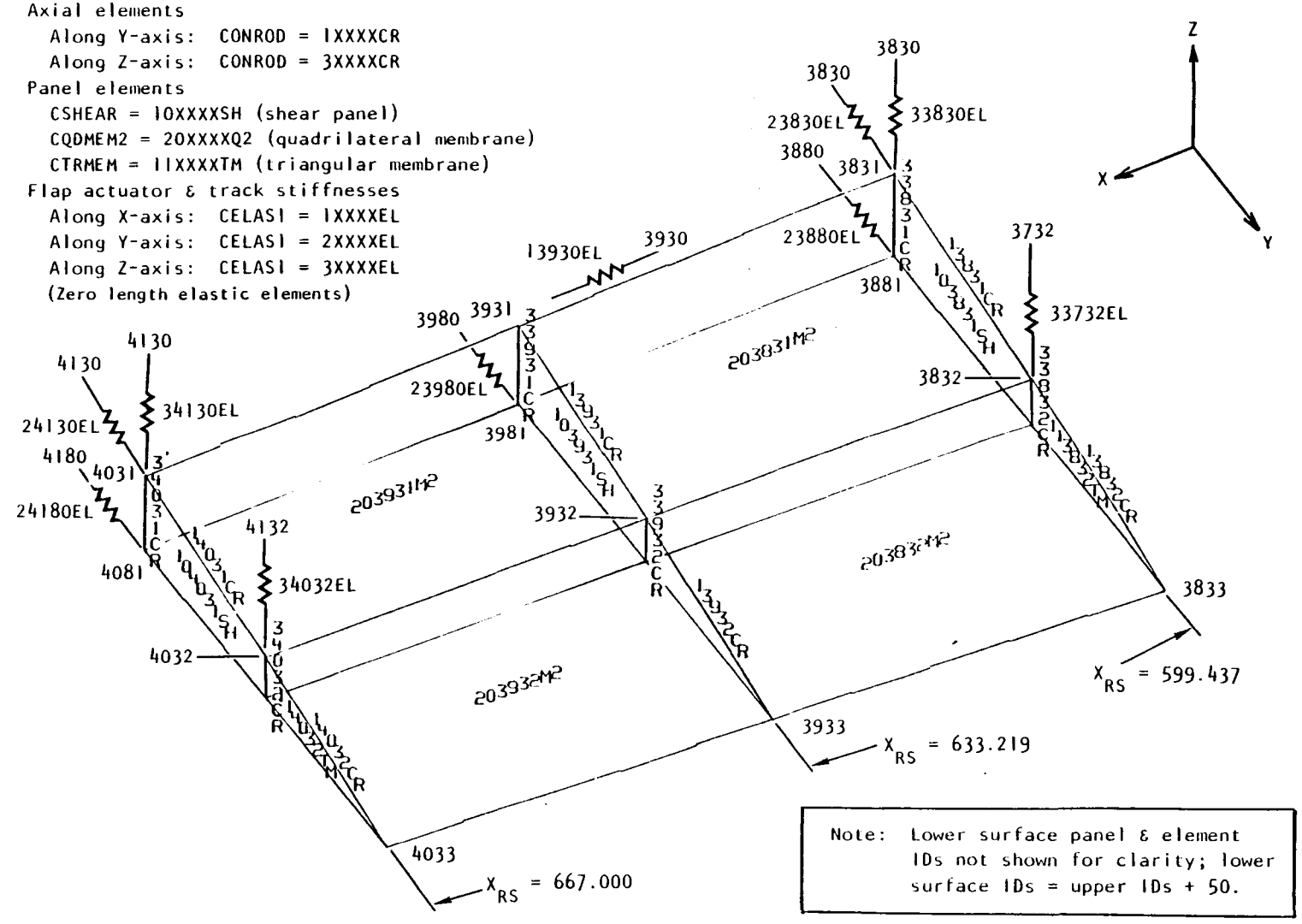


Figure C-54. - Wing flap 6 (NASTRAN model).

NASTRAN wing model ID
  Grid points = XXXX
  Axial elements
    Along Y-axis: CONROD = 1XXXXCR
    Along Z-axis: CONROD = 3XXXXCR
  Panel elements
    CSHEAR = 10XXXXSH (shear panel)
    CQDMFM2 = 20XXXXQ2 (quadrilateral membrane)
    CTRMEM = 11XXXXTM (triangular membrane)

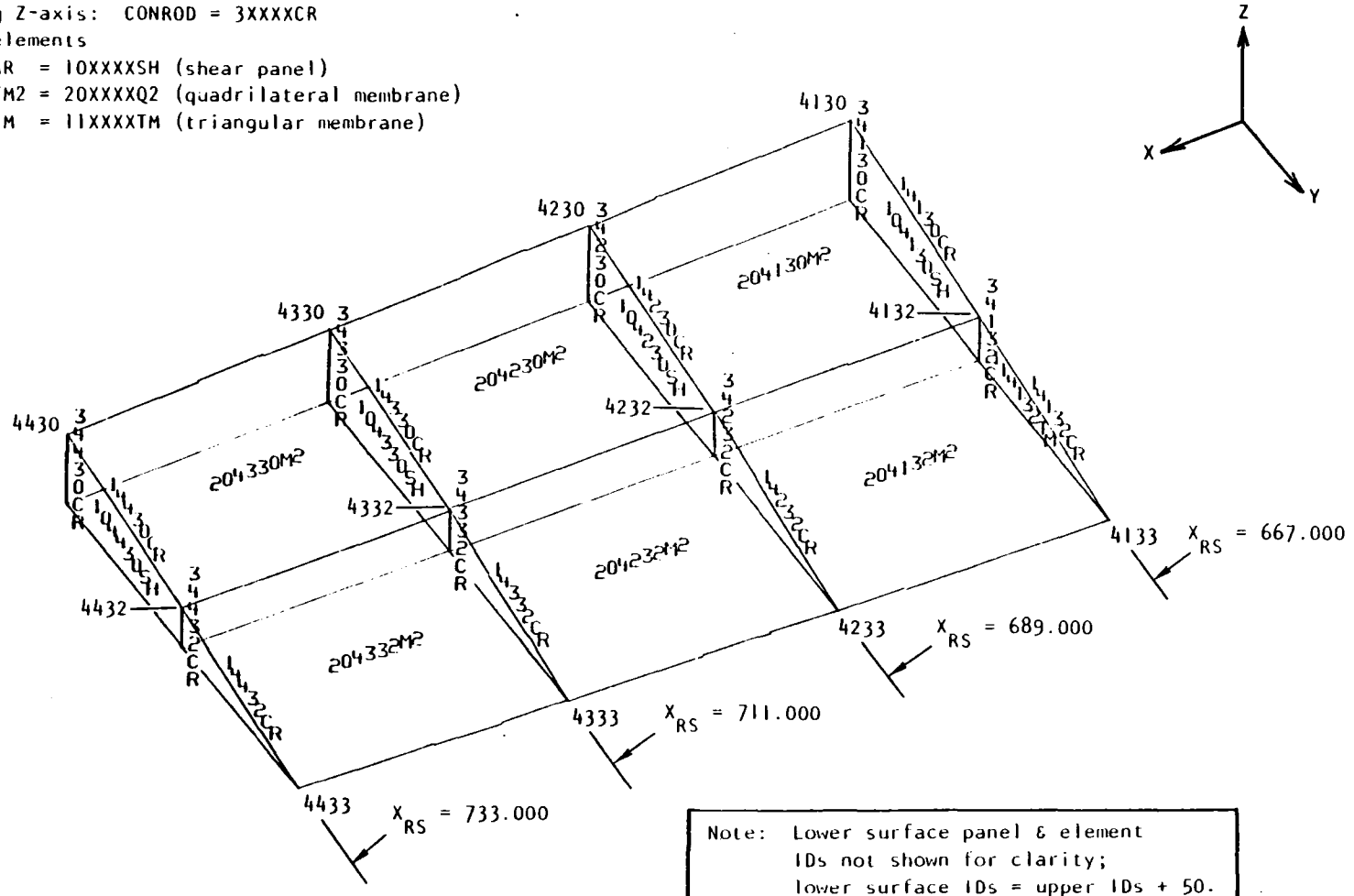


Figure C-55. - Wing trailing edge outboard of flaps (NASTRAN model).

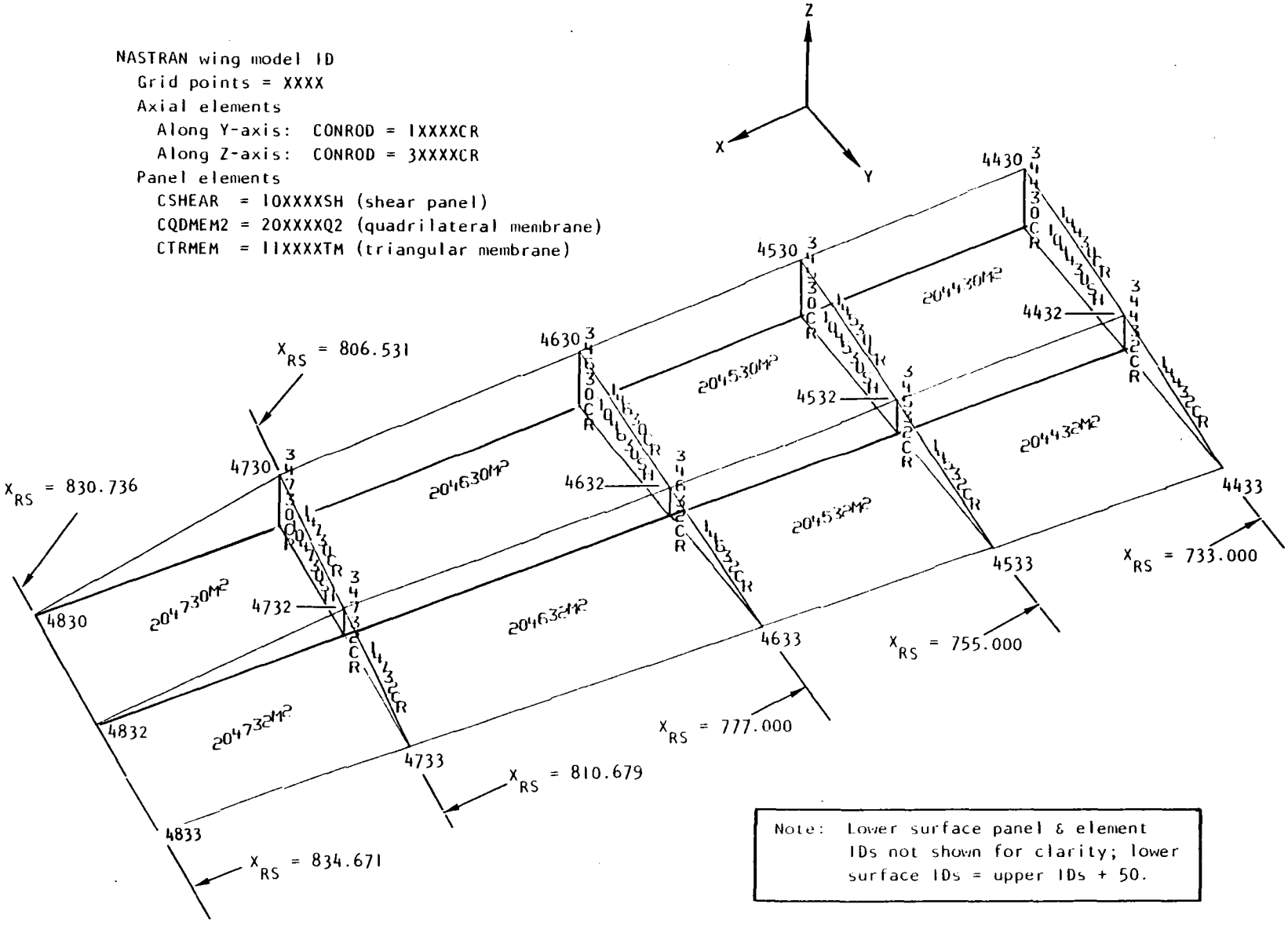


Figure C-56. - Trailing edge region adjacent to wing tip (NASTRAN model).

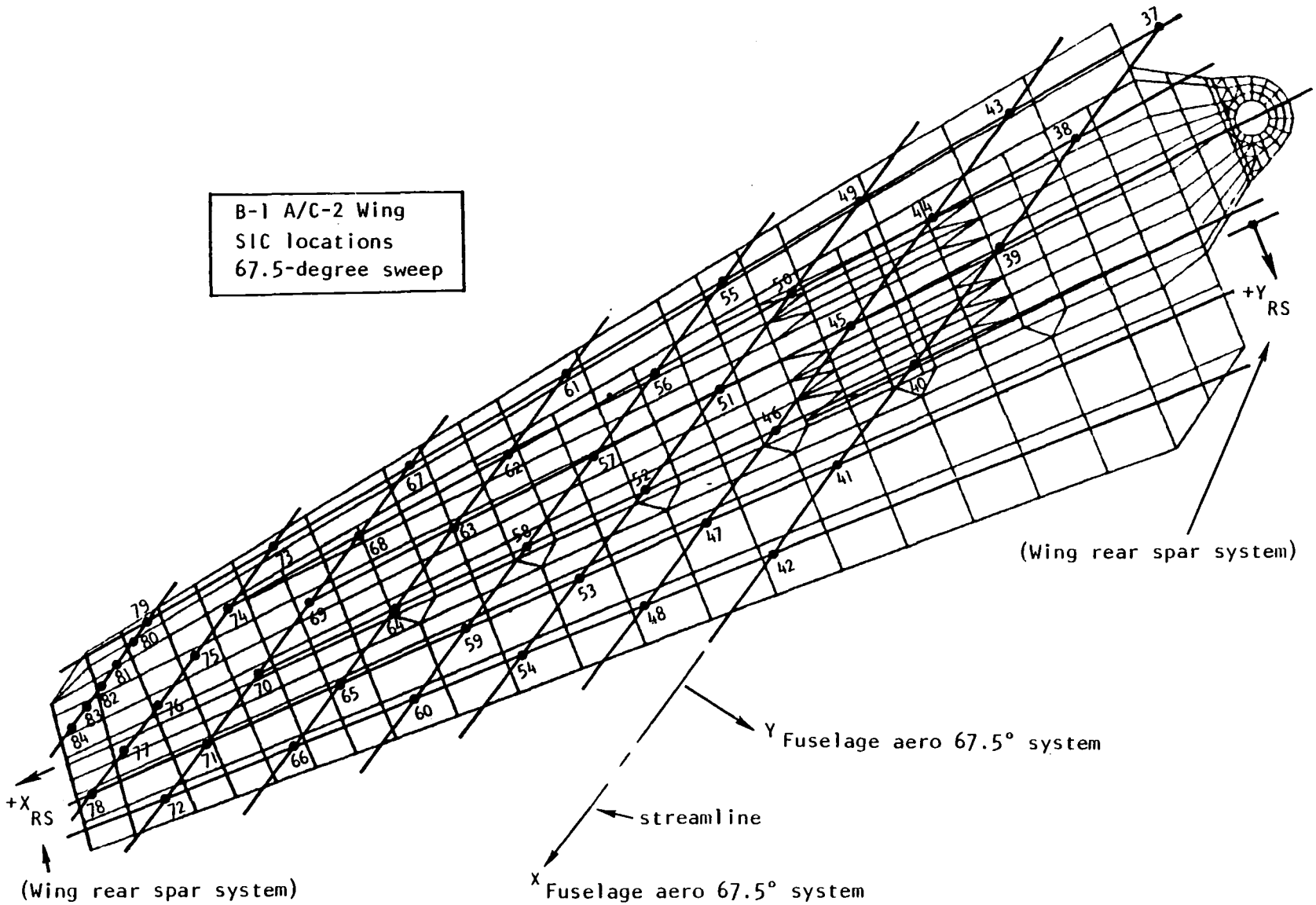


Figure C-57. - Airloads Research Study, B-1 A/C-2 wing NASTRAN model.

TABLE C-1. - WING INFLUENCE COEFFICIENT POINTS

Sic Point	Aero 67.5 System			Rear Spar System		
	X	*Y*	*Z*	$*X*_{RS}$	$*Y*_{RS}$	$*Z*_{RS}$
37	966.89	-207.95	0.0	168.87	-105.91	-6.68
38	1035.03	-207.95	.0	228.16	-72.33	-6.43
39	1103.17	-207.95	.0	287.45	-38.76	-6.17
40	1171.31	-207.95	.0	346.75	-5.18	-5.91
41	1234.58	-207.95	.0	401.80	26.00	-5.67
42	1292.99	-207.95	.0	452.62	54.78	-5.45
43	1039.93	-245.25	.0	250.79	-102.35	-4.98
44	1104.82	-245.25	.0	307.25	-70.38	-4.74
45	1169.70	-245.25	.0	363.71	-38.41	-4.49
46	1234.59	-245.25	.0	420.17	-6.43	-4.25
47	1294.85	-245.25	.0	472.61	23.26	-4.02
48	1350.47	-245.25	.0	521.00	50.67	-3.81
49	1121.58	-280.22	.0	339.05	-92.53	-3.34
50	1180.89	-280.22	.0	390.66	-63.50	-3.11
51	1240.19	-280.22	.0	442.26	-34.08	-2.89
52	1299.50	-280.22	.0	493.87	-4.85	-2.67
53	1354.58	-280.22	.0	541.80	22.29	-2.46
54	1405.41	-280.22	.0	586.03	47.54	-2.26
55	1204.34	-315.68	.0	428.52	-82.58	-1.67
56	1257.99	-315.68	.0	475.20	-56.14	-1.47
57	1311.65	-315.68	.0	521.90	-29.70	-1.26
58	1365.30	-315.68	.0	568.58	-3.26	-1.06
59	1415.12	-315.68	.0	611.93	21.29	-0.87
60	1461.11	-315.68	.0	651.95	43.95	- .70
61	1288.29	-351.64	.0	519.27	-72.48	.02
62	1336.21	-351.64	.0	560.97	-48.87	.20
63	1384.12	-351.64	.0	602.66	-25.26	.38
64	1432.04	-351.64	.0	644.36	-1.65	.56
65	1476.53	-351.64	.0	683.07	20.28	.73
66	1517.60	-351.64	.0	718.81	40.51	.89
67	1372.27	-387.61	.0	610.06	-62.38	1.71
68	1414.44	-387.61	.0	646.75	-41.60	1.87
69	1456.62	-387.61	.0	683.45	-20.81	2.03
70	1498.80	-387.61	.0	720.16	-0.03	2.19
71	1537.96	-387.61	.0	754.23	19.27	2.34
72	1574.12	-387.61	.0	785.70	37.09	2.48
73	1447.97	-421.71	.0	692.71	-54.73	3.30
74	1478.61	-421.71	.0	719.37	-39.63	3.42
75	1509.24	-421.71	.0	746.03	-24.54	3.55
76	1539.88	-421.71	.0	772.69	-9.44	3.65
77	1568.32	-421.71	.0	797.44	4.58	3.76
78	1594.58	-421.71	.0	820.29	17.52	3.86
79	1511.38	-452.11	.0	762.85	-49.92	4.70
80	1525.32	-452.11	.0	774.99	-43.05	4.76
81	1539.26	-452.11	.0	787.11	-36.18	4.81
82	1553.21	-452.11	.0	799.25	-29.31	4.86
83	1566.15	-452.11	.0	810.51	-22.95	4.91
84	1578.11	-452.11	.0	820.92	-17.04	4.96

$$X_{RS} = 0.87014771\ X_{AE67} - 0.49229443\ Y_{AE67} - 0.02211613\ Z_{AE67} - 774.8396$$

$$Y_{RS} = .49277645\ X_{AE67} + .86958992\ Y_{AE67} + .03138032\ Z_{AE67} - 401.540527$$

$$Z_{RS} = .00378361\ X_{AE67} - .03820383\ Y_{AE67} + .99926281\ Z_{AE67} - 18.287399$$

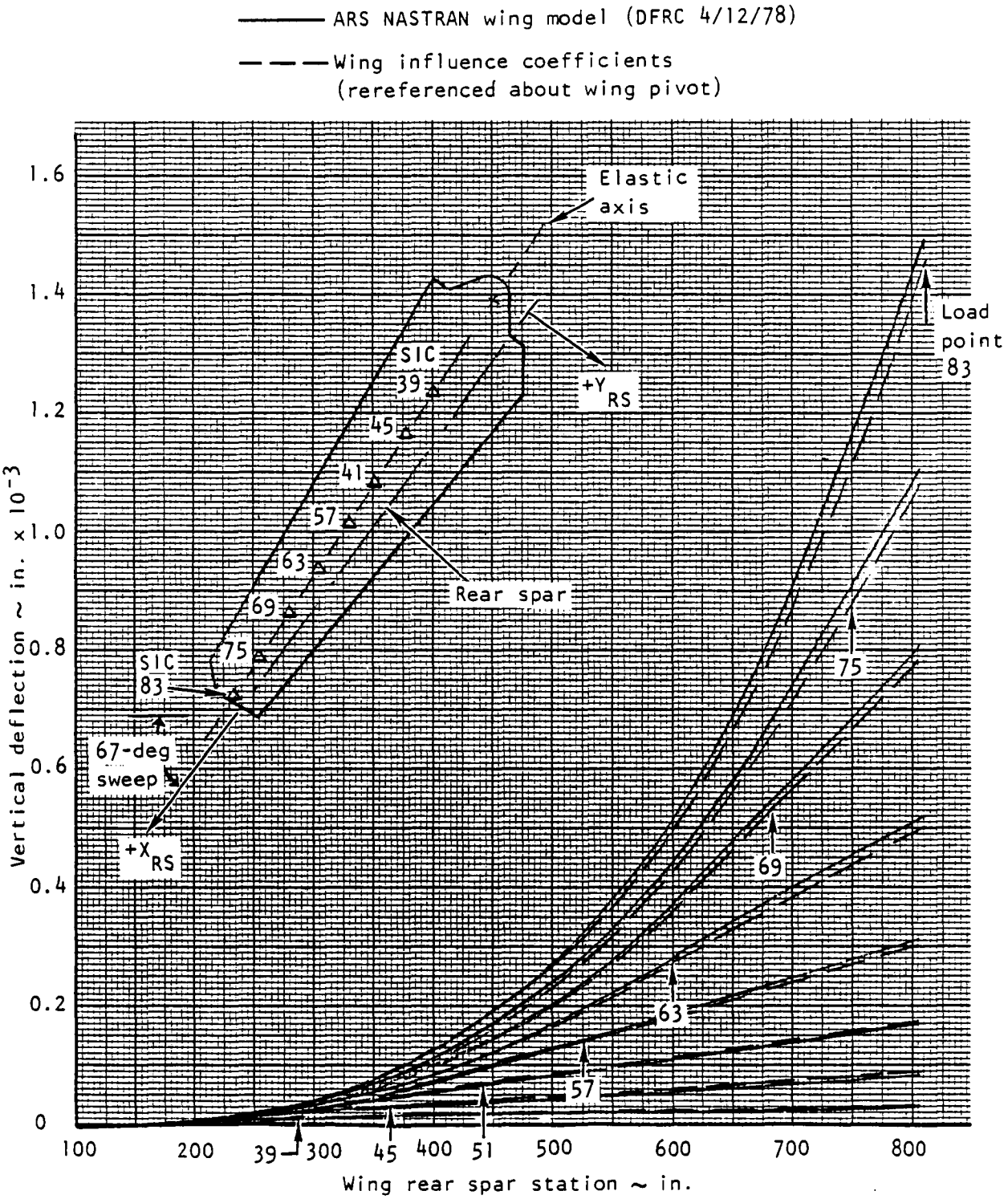


Figure C-58. - Airloads Research Study, B-1 A/C-2 wing NASTRAN model deflections versus influence coefficients.

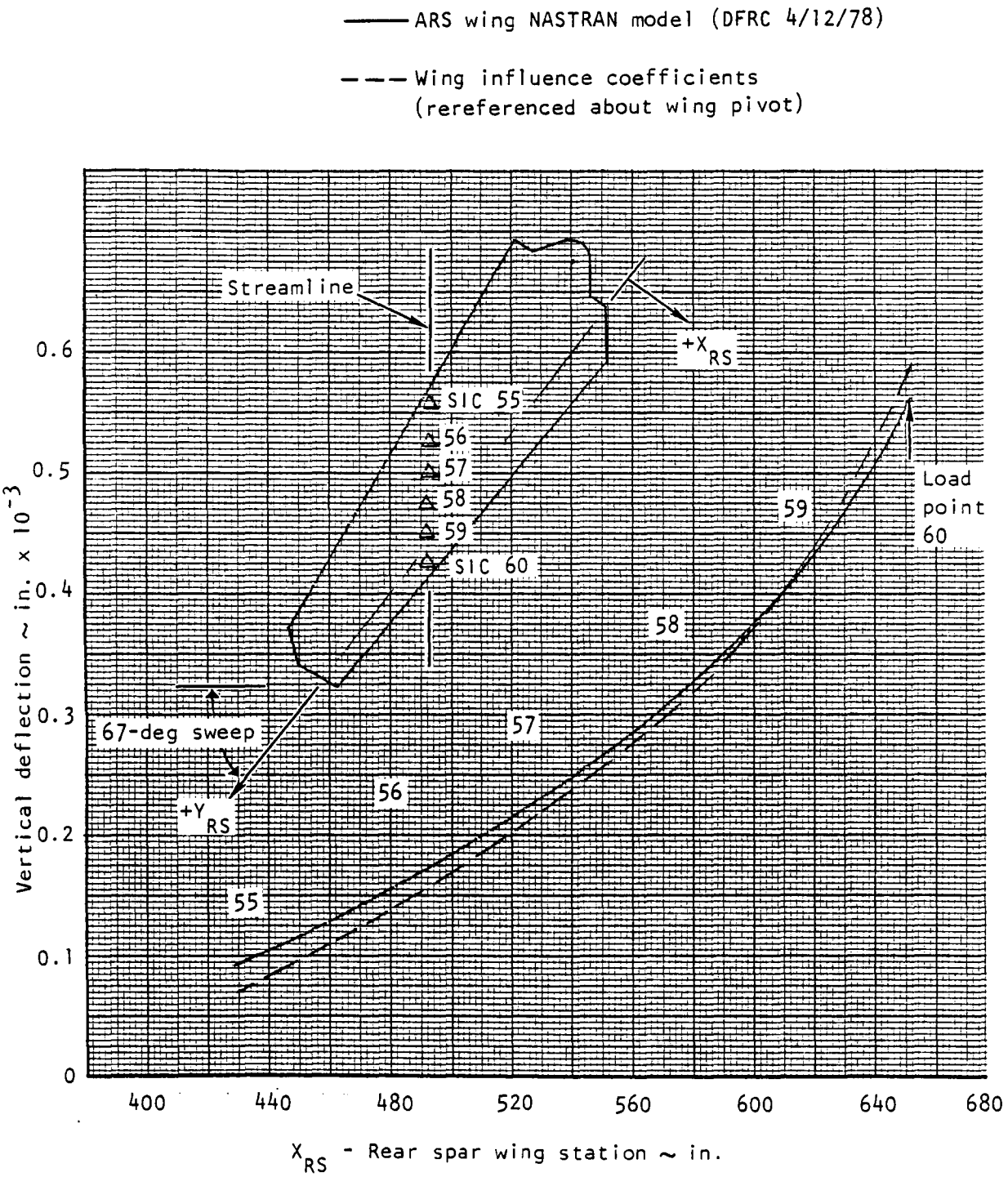


Figure C-59. - Airloads Research Study, B-1 A/C-2 wing NASTRAN model deflections versus influence coefficients.

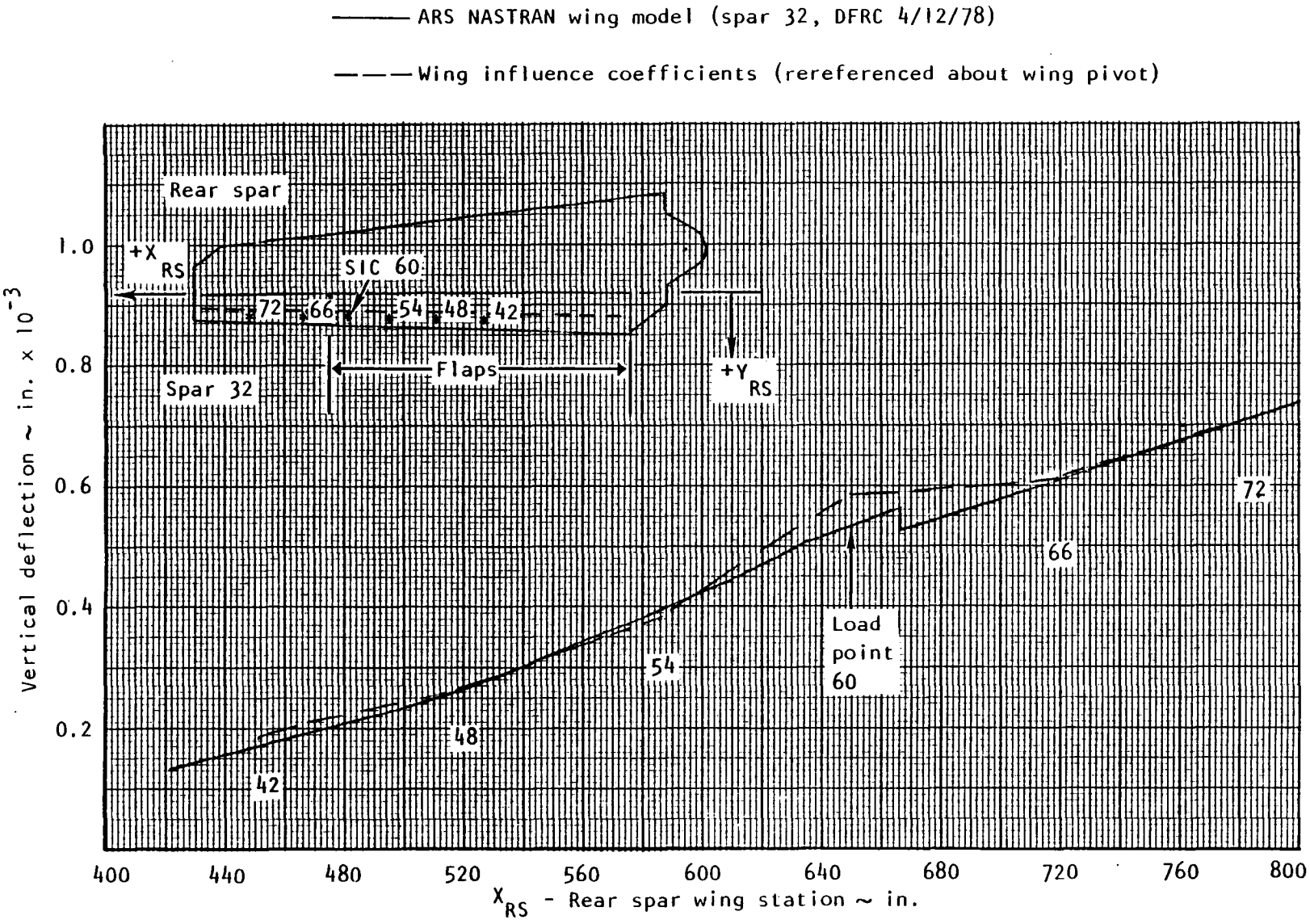


Figure C-60. - Airloads Research Study, B-1 A/C-2 wing NASTRAN model deflections versus influence coefficients.

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
1-	CBAR	2607	11261	2607	2707	.0	.0	10.0	1	
2-	CBAR	2609	11261	2609	2709	.0	.0	10.0	1	
3-	CBAR	2611	11261	2611	2711	.0	.0	10.0	1	
4-	CBAR	2612	11261	2612	2712	.0	.0	10.0	1	
5-	CBAR	2614	12511	2614	2714	.0	.0	10.0	1	
6-	CBAR	2615	12511	2615	2715	.0	.0	10.0	1	
7-	CBAR	2617	11261	2617	2717	.0	.0	10.0	1	
8-	CBAR	2619	11261	2619	2719	.0	.0	10.0	1	
9-	CBAR	2621	11261	2621	2721	.0	.0	10.0	1	
10-	CBAR	2623	11892	2623	2723	.0	.0	10.0	1	
11-	CBAR	2626	11892	2626	2726	.0	.0	10.0	1	
12-	CBAR	2657	1563	2657	2757	.0	.0	10.0	1	
13-	CBAR	2659	1563	2659	2759	.0	.0	10.0	1	
14-	CBAR	2661	1563	2661	2761	.0	.0	10.0	1	
15-	CBAR	2662	1563	2662	2762	.0	.0	10.0	1	
16-	CBAR	2664	11512	2664	2764	.0	.0	10.0	1	
17-	CBAR	2665	11512	2665	2765	.0	.0	10.0	1	
18-	CBAR	2667	1583	2667	2767	.0	.0	10.0	1	
19-	CBAR	2669	1575	2669	2769	.0	.0	10.0	1	
20-	CBAR	2671	1563	2671	2771	.0	.0	10.0	1	
21-	CBAR	2673	1862	2673	2773	.0	.0	10.0	1	
22-	CBAR	2676	1822	2676	2776	.0	.0	10.0	1	
23-	CBAR	2707	11235	2707	2807	.0	.0	10.0	1	
24-	CBAR	2709	11235	2709	2809	.0	.0	10.0	1	
25-	CBAR	2711	11235	2711	2811	.0	.0	10.0	1	
26-	CBAR	2712	11235	2712	2812	.0	.0	10.0	1	
27-	CBAR	2714	12446	2714	2814	.0	.0	10.0	1	
28-	CBAR	2715	12446	2715	2815	.0	.0	10.0	1	
29-	CBAR	2717	11235	2717	2817	.0	.0	10.0	1	
30-	CBAR	2719	11235	2719	2819	.0	.0	10.0	1	
31-	CBAR	2721	11235	2721	2821	.0	.0	10.0	1	
32-	CBAR	2723	11853	2723	2823	.0	.0	10.0	1	
33-	CBAR	2726	11624	2726	2826	.0	.0	10.0	1	
34-	CBAR	2757	1555	2757	2857	.0	.0	10.0	1	
35-	CBAR	2759	1555	2759	2859	.0	.0	10.0	1	
36-	CBAR	2761	1555	2761	2861	.0	.0	10.0	1	
37-	CBAR	2762	1555	2762	2862	.0	.0	10.0	1	
38-	CBAR	2764	1500	2764	2864	.0	.0	10.0	1	
39-	CBAR	2765	1500	2765	2865	.0	.0	10.0	1	
40-	CBAR	2767	1555	2767	2867	.0	.0	10.0	1	
41-	CBAR	2769	1555	2769	2869	.0	.0	10.0	1	
42-	CBAR	2771	1555	2771	2871	.0	.0	10.0	1	
43-	CBAR	2773	1832	2773	2873	.0	.0	10.0	1	
44-	CBAR	2776	1822	2776	2876	.0	.0	10.0	1	
45-	CBAR	32004	21000	2004	2099	1099			2	
46-	CBAR	32054	21000	2054	2099	1099			2	
47-	CELAS1	12253	1	2253	1	2254	1			
48-	CELAS1	12430	1	2430	1	2431	1			
49-	CELAS1	12653	1	2653	1	2654	1			
50-	CELAS1	12730	1	2730	1	2731	1			

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
51-	CELAS1	13030	1	3030	1	3031	1			
52-	CELAS1	13053	1	3053	1	3054	1			
53-	CELAS1	13330	1	3330	1	3331	1			
54-	CELAS1	13453	1	3453	1	3454	1			
55-	CELAS1	13630	1	3630	1	3631	1			
56-	CELAS1	13853	1	3853	1	3854	1			
57-	CELAS1	13930	1	3930	1	3931	1			
58-	CELAS1	14153	1	4153	1	4154	1			
59-	CELAS1	14453	1	4453	1	4454	1			
60-	CELAS1	22003	12	2003	2	2004	2			
61-	CELAS1	22053	12	2053	2	2054	2			
62-	CELAS1	22203	12	2203	2	2204	2			
63-	CELAS1	22230	123	2230	2	2331	2			
64-	CELAS1	22253	12	2253	2	2254	2			
65-	CELAS1	22280	123	2280	2	2381	2			
66-	CELAS1	22403	12	2403	2	2404	2			
67-	CELAS1	22453	12	2453	2	2454	2			
68-	CELAS1	22480	123	2480	2	2481	2			
69-	CELAS1	22503	12	2503	2	2404	2			
70-	CELAS1	22530	123	2530	2	2531	2			
71-	CELAS1	22553	12	2553	2	2454	2			
72-	CELAS1	22580	123	2580	2	2581	2			
73-	CELAS1	22603	12	2603	2	2604	2			
74-	CELAS1	22630	123	2530	2	2631	2			
75-	CELAS1	22653	12	2653	2	2654	2			
76-	CELAS1	22680	123	2580	2	2681	2			
77-	CELAS1	22780	123	2780	2	2781	2			
78-	CELAS1	22803	12	2803	2	2904	2			
79-	CELAS1	22830	123	2930	2	2831	2			
80-	CELAS1	22853	12	2853	2	2954	2			
81-	CELAS1	22880	123	2980	2	2881	2			
82-	CELAS1	22903	12	2903	2	2904	2			
83-	CELAS1	22930	123	2930	2	2931	2			
84-	CELAS1	22953	12	2953	2	2954	2			
85-	CELAS1	22980	123	2980	2	2981	2			
86-	CELAS1	23003	12	3003	2	3004	2			
87-	CELAS1	23053	12	3053	2	3054	2			
88-	CELAS1	23080	123	3080	2	3081	2			
89-	CELAS1	23103	12	3103	2	3104	2			
90-	CELAS1	23130	123	3230	2	3131	2			
91-	CELAS1	23153	12	3153	2	3154	2			
92-	CELAS1	23180	123	3280	2	3181	2			
93-	CELAS1	23203	12	3203	2	3204	2			
94-	CELAS1	23230	123	3230	2	3231	2			
95-	CELAS1	23253	12	3253	2	3254	2			
96-	CELAS1	23280	123	3280	2	3281	2			
97-	CELAS1	23303	12	3303	2	3204	2			
98-	CELAS1	23353	12	3353	2	3254	2			
99-	CELAS1	23380	123	3380	2	3381	2			
100-	CELAS1	23403	12	3403	2	3404	2			

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
101-	CELAS1	23430	123	3530	2	3431	2			
102-	CELAS1	23453	12	3453	2	3454	2			
103-	CELAS1	23480	123	3580	2	3481	2			
104-	CELAS1	23503	12	3503	2	3604	2			
105-	CELAS1	23530	123	3530	2	3531	2			
106-	CELAS1	23553	12	3553	2	3654	2			
107-	CELAS1	23580	123	3580	2	3581	2			
108-	CELAS1	23603	12	3603	2	3604	2			
109-	CELAS1	23653	12	3653	2	3654	2			
110-	CELAS1	23680	123	3680	2	3681	2			
111-	CELAS1	23703	12	3703	2	3704	2			
112-	CELAS1	23730	123	3830	2	3731	2			
113-	CELAS1	23753	12	3753	2	3754	2			
114-	CELAS1	23780	123	3880	2	3781	2			
115-	CELAS1	23803	12	3803	2	3804	2			
116-	CELAS1	23830	123	3830	2	3831	2			
117-	CELAS1	23853	12	3853	2	3854	2			
118-	CELAS1	23880	123	3880	2	3881	2			
119-	CELAS1	23903	12	3903	2	3904	2			
120-	CELAS1	23953	12	3953	2	3954	2			
121-	CELAS1	23980	123	3980	2	3981	2			
122-	CELAS1	24003	12	4003	2	3904	2			
123-	CELAS1	24053	12	4053	2	3954	2			
124-	CELAS1	24103	12	4103	2	4104	2			
125-	CELAS1	24130	123	4130	2	4031	2			
126-	CELAS1	24153	12	4153	2	4154	2			
127-	CELAS1	24180	123	4180	2	4081	2			
128-	CELAS1	24203	12	4203	2	4304	2			
129-	CELAS1	24253	12	4253	2	4354	2			
130-	CELAS1	24303	12	4303	2	4304	2			
131-	CELAS1	24353	12	4353	2	4354	2			
132-	CELAS1	24403	12	4403	2	4404	2			
133-	CELAS1	24453	12	4453	2	4454	2			
134-	CELAS1	24503	12	4503	2	4504	2			
135-	CELAS1	24553	12	4553	2	4554	2			
136-	CELAS1	24603	12	4603	2	4604	2			
137-	CELAS1	24653	12	4653	2	4654	2			
138-	CELAS1	32003	1	2003	3	2004	3			
139-	CELAS1	32203	1	2203	3	2204	3			
140-	CELAS1	32230	1	2230	3	2331	3			
141-	CELAS1	32232	13	2232	3	2332	3			
142-	CELAS1	32402	1	2402	3	2502	3			
143-	CELAS1	32403	1	2403	3	2404	3			
144-	CELAS1	32503	1	2503	3	2404	3			
145-	CELAS1	32530	1	2530	3	2531	3			
146-	CELAS1	32532	14	2532	3	2632	3			
147-	CELAS1	32603	1	2603	3	2604	3			
148-	CELAS1	32630	1	2530	3	2631	3			
149-	CELAS1	32802	1	2802	3	2902	3			
150-	CELAS1	32803	1	2803	3	2904	3			

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
151-	CELAS1	32830	1	2930	3	2831	3			
152-	CELAS1	32832	14	2832	3	2932	3			
153-	CELAS1	32903	1	2903	3	2904	3			
154-	CELAS1	32930	1	2930	3	2931	3			
155-	CELAS1	33003	1	3003	3	3004	3			
156-	CELAS1	33103	1	3103	3	3104	3			
157-	CELAS1	33130	1	3230	3	3131	3			
158-	CELAS1	33132	14	3132	3	3232	3			
159-	CELAS1	33202	1	3202	3	3302	3			
160-	CELAS1	33203	1	3203	3	3204	3			
161-	CELAS1	33230	1	3230	3	3231	3			
162-	CELAS1	33303	1	3303	3	3204	3			
163-	CELAS1	33403	1	3403	3	3404	3			
164-	CELAS1	33430	1	3530	3	3431	3			
165-	CELAS1	33432	14	3432	3	3532	3			
166-	CELAS1	33502	1	3502	3	3602	3			
167-	CELAS1	33503	1	3503	3	3604	3			
168-	CELAS1	33530	1	3530	3	3531	3			
169-	CELAS1	33603	1	3603	3	3604	3			
170-	CELAS1	33703	1	3703	3	3704	3			
171-	CELAS1	33730	1	3830	3	3731	3			
172-	CELAS1	33732	14	3732	3	3832	3			
173-	CELAS1	33803	1	3803	3	3804	3			
174-	CELAS1	33830	1	3830	3	3831	3			
175-	CELAS1	33902	1	3902	3	4002	3			
176-	CELAS1	33903	1	3903	3	3904	3			
177-	CELAS1	34003	1	4003	3	3904	3			
178-	CELAS1	34032	13	4032	3	4132	3			
179-	CELAS1	34103	1	4103	3	4104	3			
180-	CELAS1	34130	1	4130	3	4031	3			
181-	CELAS1	34202	1	4202	3	4302	3			
182-	CELAS1	34203	1	4203	3	4304	3			
183-	CELAS1	34303	1	4303	3	4304	3			
184-	CELAS1	34403	1	4403	3	4404	3			
185-	CELAS1	34503	1	4503	3	4504	3			
186-	CELAS1	34602	13	4602	3	4612	3			
187-	CELAS1	34603	1	4603	3	4604	3			
188-	CONROD	1099	1099	2099	1	1.00				
189-	CONROD	1401	1401	1000	2	50.0				
190-	CONROD	1402	1402	1000	2	50.0				
191-	CONROD	1403	1403	1000	2	50.0				
192-	CONROD	1404	1404	1000	2	50.0				
193-	CONROD	1413	1413	1000	2	50.0				
194-	CONROD	1414	1414	1000	2	50.0				
195-	CONROD	1415	1415	1000	2	50.0				
196-	CONROD	1416	1416	1000	2	50.0				
197-	CONROD	1455	1455	1050	2	50.0				
198-	CONROD	1456	1456	1050	2	50.0				
199-	CONROD	1457	1457	1050	2	50.0				
200-	CONROD	1458	1458	1050	2	50.0				

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
201-	CONROD	1459	1459	1050	2	50.0				
202-	CONROD	1460	1460	1050	2	50.0				
203-	CONROD	1461	1461	1050	2	50.0				
204-	CONROD	1462	1462	1050	2	50.0				
205-	CONROD	1804	1804	1904	2	4.040				
206-	CONROD	1815	1815	1915	2	2.100				
207-	CONROD	1828	1828	1928	2	.904				
208-	CONROD	1854	1854	1954	2	3.492				
209-	CONROD	1865	1865	1965	2	2.126				
210-	CONROD	1878	1878	1978	2	.939				
211-	CONROD	1904	1904	2004	2	5.810				
212-	CONROD	1915	1915	2015	2	2.100				
213-	CONROD	1928	1928	2028	2	.904				
214-	CONROD	1954	1954	2054	2	5.554				
215-	CONROD	1965	1965	2065	2	2.126				
216-	CONROD	1978	1978	2078	2	.939				
217-	CONROD	2004	2004	2104	1	6.441				
218-	CONROD	2007	2007	2107	1	5.098				
219-	CONROD	2011	2011	2111	1	4.078				
220-	CONROD	2014	2014	2114	1	4.127				
221-	CONROD	2015	2015	2115	1	3.968				
222-	CONROD	2019	2019	2119	1	3.961				
223-	CONROD	2023	2023	2123	1	4.078				
224-	CONROD	2026	2026	2126	1	3.059				
225-	CONROD	2028	2028	2128	1	7.002				
226-	CONROD	2029	2029	2129	1	.5				
227-	CONROD	2030	2030	2130	1	.5				
228-	CONROD	2032	2032	2132	1	.5				
229-	CONROD	2033	2032	2133	1	.5				
230-	CONROD	2054	2054	2154	1	4.454				
231-	CONROD	2057	2057	2157	1	2.060				
232-	CONROD	2061	2061	2161	1	1.556				
233-	CONROD	2064	2064	2164	1	1.581				
234-	CONROD	2065	2065	2165	1	1.260				
235-	CONROD	2069	2069	2169	1	.784				
236-	CONROD	2073	2073	2173	1	2.626				
237-	CONROD	2076	2076	2176	1	1.923				
238-	CONROD	2078	2078	2178	1	5.504				
239-	CONROD	2079	2079	2179	1	.5				
240-	CONROD	2080	2080	2180	1	.5				
241-	CONROD	2082	2082	2182	1	.5				
242-	CONROD	2083	2082	2183	1	.5				
243-	CONROD	2104	2104	2204	1	3.295				
244-	CONROD	2107	2107	2207	1	4.195				
245-	CONROD	2111	2111	2211	1	3.356				
246-	CONROD	2114	2114	2214	1	3.782				
247-	CONROD	2115	2115	2215	1	3.782				
248-	CONROD	2119	2119	2219	1	3.356				
249-	CONROD	2123	2123	2223	1	3.356				
250-	CONROD	2126	2126	2226	1	2.517				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
251-	CONROD	2128	2128	2228	1	3.237				
252-	CONROD	2129	2129	2229	1	.5				
253-	CONROD	2130	2130	2230	1	.5				
254-	CONROD	2132	2132	2232	1	.5				
255-	CONROD	2133	2133	2233	1	.5				
256-	CONROD	2154	2154	2254	1	3.677				
257-	CONROD	2157	2157	2257	1	1.758				
258-	CONROD	2161	2161	2261	1	1.358				
259-	CONROD	2164	2164	2264	1	1.063				
260-	CONROD	2165	2165	2265	1	.507				
261-	CONROD	2169	2169	2269	1	.245				
262-	CONROD	2173	2173	2273	1	.543				
263-	CONROD	2176	2176	2276	1	.457				
264-	CONROD	2178	2178	2278	1	3.624				
265-	CONROD	2179	2179	2279	1	.5				
266-	CONROD	2180	2180	2280	1	.5				
267-	CONROD	2182	2182	2282	1	.5				
268-	CONROD	2183	2183	2233	1	.5				
269-	CONROD	2204	2204	2304	1	2.730				
270-	CONROD	2207	2207	2307	1	3.184				
271-	CONROD	2211	2211	2311	1	3.194				
272-	CONROD	2214	2214	2314	1	3.654				
273-	CONROD	2215	2215	2315	1	3.654				
274-	CONROD	2219	2219	2319	1	3.184				
275-	CONROD	2223	2223	2323	1	3.184				
276-	CONROD	2226	2226	2326	1	2.388				
277-	CONROD	2228	2228	2328	1	3.136				
278-	CONROD	2229	2229	2429	4	.25				
279-	CONROD	2230	2230	2430	4	.25				
280-	CONROD	2254	2254	2354	1	3.042				
281-	CONROD	2257	2257	2357	1	1.366				
282-	CONROD	2261	2261	2361	1	1.330				
283-	CONROD	2264	2264	2364	1	1.321				
284-	CONROD	2265	2265	2365	1	.923				
285-	CONROD	2269	2269	2369	1	.578				
286-	CONROD	2273	2273	2373	1	.749				
287-	CONROD	2276	2276	2376	1	.548				
288-	CONROD	2278	2278	2378	1	3.645				
289-	CONROD	2279	2279	2479	1	.25				
290-	CONROD	2280	2280	2480	1	.25				
291-	CONROD	2304	2304	2404	1	2.577				
292-	CONROD	2307	2307	2407	1	2.917				
293-	CONROD	2311	2311	2411	1	3.015				
294-	CONROD	2314	2314	2414	1	3.525				
295-	CONROD	2315	2315	2415	1	3.525				
296-	CONROD	2319	2319	2419	1	3.015				
297-	CONROD	2323	2323	2423	1	3.015				
298-	CONROD	2326	2326	2426	1	2.261				
299-	CONROD	2328	2328	2428	1	3.054				
300-	CONROD	2331	2331	2431	1	.5				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
301-	CONROD	2332	2332	2432	1	.5				
302-	CONROD	2333	2333	2433	1	.5				
303-	CONROD	2354	2354	2454	1	2.936				
304-	CONROD	2357	2357	2457	1	1.322				
305-	CONROD	2361	2361	2461	1	1.318				
306-	CONROD	2364	2364	2464	1	1.494				
307-	CONROD	2365	2365	2465	1	1.036				
308-	CONROD	2369	2369	2469	1	.510				
309-	CONROD	2373	2373	2473	1	.697				
310-	CONROD	2376	2376	2476	1	.603				
311-	CONROD	2378	2378	2478	1	3.377				
312-	CONROD	2381	2381	2481	1	.5				
313-	CONROD	2382	2382	2482	1	.5				
314-	CONROD	2404	2404	2504	1	2.164				
315-	CONROD	2407	2407	2507	1	1.685				
316-	CONROD	2408	2407	2509	1	.707				
317-	CONROD	2409	2411	2509	1	.707				
318-	CONROD	2411	2411	2511	1	1.414				
319-	CONROD	2412	2411	2512	1	.707				
320-	CONROD	2413	2414	2512	1	.707				
321-	CONROD	2414	2414	2514	1	2.681				
322-	CONROD	2415	2415	2515	1	2.681				
323-	CONROD	2416	2415	2517	1	.707				
324-	CONROD	2417	2419	2517	1	.707				
325-	CONROD	2419	2419	2519	1	1.414				
326-	CONROD	2420	2419	2521	1	.707				
327-	CONROD	2421	2423	2521	1	.707				
328-	CONROD	2423	2423	2523	1	2.121				
329-	CONROD	2426	2426	2526	1	2.121				
330-	CONROD	2428	2428	2528	1	2.987				
331-	CONROD	2429	2429	2529	4	.25				
332-	CONROD	2430	2430	2530	4	.25				
333-	CONROD	2431	2431	2531	1	.5				
334-	CONROD	2432	2432	2532	1	.5				
335-	CONROD	2433	2433	2533	1	.5				
336-	CONROD	2454	2454	2554	1	2.823				
337-	CONROD	2457	2457	2557	1	.934				
338-	CONROD	2458	2457	2559	1	.312				
339-	CONROD	2459	2461	2559	1	.312				
340-	CONROD	2461	2461	2561	1	.624				
341-	CONROD	2462	2461	2562	1	.314				
342-	CONROD	2463	2464	2562	1	.314				
343-	CONROD	2464	2464	2564	1	1.140				
344-	CONROD	2465	2465	2565	1	1.044				
345-	CONROD	2466	2465	2567	1	.100				
346-	CONROD	2467	2469	2567	1	.100				
347-	CONROD	2469	2469	2569	1	.459				
348-	CONROD	2470	2469	2571	1	.208				
349-	CONROD	2471	2473	2571	1	.208				
350-	CONROD	2473	2473	2573	1	.704				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
351-	CONROD	2476	2476	2576	1	.650				
352-	CONROD	2478	2478	2578	1	3.265				
353-	CONROD	2479	2479	2579	1	.25				
354-	CONROD	2480	2480	2580	1	.25				
355-	CONROD	2481	2481	2581	1	.5				
356-	CONROD	2482	2482	2582	1	.5				
357-	CONROD	2504	2504	2604	1	1.867				
358-	CONROD	2507	2507	2607	1	1.320				
359-	CONROD	2509	2509	2609	1	1.320				
360-	CONROD	2511	2511	2611	1	1.320				
361-	CONROD	2512	2512	2612	1	1.320				
362-	CONROD	2514	2514	2614	1	2.588				
363-	CONROD	2515	2515	2615	1	2.588				
364-	CONROD	2517	2517	2617	1	1.320				
365-	CONROD	2519	2519	2619	1	1.320				
366-	CONROD	2521	2521	2621	1	1.320				
367-	CONROD	2523	2523	2623	1	1.980				
368-	CONROD	2526	2526	2626	1	1.980				
369-	CONROD	2528	2528	2628	1	2.910				
370-	CONROD	2529	2529	2729	4	.25				
371-	CONROD	2530	2530	2730	4	.25				
372-	CONROD	2554	2554	2654	1	2.421				
373-	CONROD	2557	2557	2657	1	.583				
374-	CONROD	2559	2559	2659	1	.583				
375-	CONROD	2561	2561	2661	1	.583				
376-	CONROD	2562	2562	2662	1	.565				
377-	CONROD	2564	2564	2664	1	1.365				
378-	CONROD	2565	2565	2665	1	1.358				
379-	CONROD	2567	2567	2667	1	.297				
380-	CONROD	2569	2569	2669	1	.589				
381-	CONROD	2571	2571	2671	1	.540				
382-	CONROD	2573	2573	2673	1	.897				
383-	CONROD	2576	2576	2676	1	.873				
384-	CONROD	2578	2578	2678	1	3.135				
385-	CONROD	2579	2579	2779	1	.25				
386-	CONROD	2580	2580	2780	1	.25				
387-	CONROD	2604	2604	2704	1	1.828				
388-	CONROD	2628	2628	2728	1	2.846				
389-	CONROD	2631	2631	2731	1	.5				
390-	CONROD	2632	2632	2732	1	.5				
391-	CONROD	2633	2633	2733	1	.5				
392-	CONROD	2654	2654	2754	1	2.304				
393-	CONROD	2678	2678	2778	1	3.028				
394-	CONROD	2681	2681	2781	1	.5				
395-	CONROD	2682	2682	2782	1	.5				
396-	CONROD	2704	2704	2804	1	1.828				
397-	CONROD	2728	2728	2828	1	2.809				
398-	CONROD	2729	2729	2929	4	.25				
399-	CONROD	2730	2730	2930	4	.25				
400-	CONROD	2731	2731	2831	1	.5				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
401-	CONROD	2732	2732	2832	1	.5				
402-	CONROD	2733	2733	2833	1	.5				
403-	CONROD	2754	2754	2854	1	2.162				
404-	CONROD	2778	2778	2878	1	2.971				
405-	CONROD	2779	2779	2979	1	.25				
406-	CONROD	2780	2780	2980	1	.25				
407-	CONROD	2781	2781	2881	1	.5				
408-	CONROD	2782	2782	2882	1	.5				
409-	CONROD	2804	2804	2904	1	1.688				
410-	CONROD	2807	2807	2907	1	1.052				
411-	CONROD	2809	2809	2909	1	1.198				
412-	CONROD	2811	2811	2911	1	1.198				
413-	CONROD	2812	2812	2912	1	1.198				
414-	CONROD	2814	2814	2914	1	2.365				
415-	CONROD	2815	2815	2915	1	2.365				
416-	CONROD	2817	2817	2917	1	1.198				
417-	CONROD	2819	2819	2919	1	1.198				
418-	CONROD	2821	2821	2921	1	1.198				
419-	CONROD	2823	2823	2923	1	1.796				
420-	CONROD	2826	2826	2926	1	1.058				
421-	CONROD	2828	2828	2928	1	2.753				
422-	CONROD	2854	2854	2954	1	2.051				
423-	CONROD	2857	2857	2957	1	.541				
424-	CONROD	2859	2859	2959	1	.541				
425-	CONROD	2861	2861	2961	1	.541				
426-	CONROD	2862	2862	2962	1	.541				
427-	CONROD	2864	2864	2964	1	1.436				
428-	CONROD	2865	2865	2965	1	1.436				
429-	CONROD	2867	2867	2967	1	.541				
430-	CONROD	2869	2869	2969	1	.541				
431-	CONROD	2871	2871	2971	1	.541				
432-	CONROD	2873	2873	2973	1	.811				
433-	CONROD	2876	2876	2976	1	.546				
434-	CONROD	2878	2878	2978	1	2.903				
435-	CONROD	2904	2904	3004	1	1.491				
436-	CONROD	2907	2907	3007	1	.441				
437-	CONROD	2908	2909	3007	1	.623				
438-	CONROD	2909	2909	3011	1	.623				
439-	CONROD	2911	2911	3011	1	1.246				
440-	CONROD	2912	2912	3011	1	.623				
441-	CONROD	2913	2912	3014	1	.623				
442-	CONROD	2914	2914	3014	1	2.366				
443-	CONROD	2915	2915	3015	1	2.366				
444-	CONROD	2916	2917	3015	1	.623				
445-	CONROD	2917	2917	3019	1	.623				
446-	CONROD	2919	2919	3019	1	1.246				
447-	CONROD	2920	2921	3019	1	.623				
448-	CONROD	2921	2921	3023	1	.623				
449-	CONROD	2923	2923	3023	1	1.246				
450-	CONROD	2926	2926	3026	1	1.246				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
451-	CONROD	2928	2928	3028	1	2.521				
452-	CONROD	2929	2929	3029	4	.25				
453-	CONROD	2930	2930	3030	4	.25				
454-	CONROD	2931	2931	3031	1	.5				
455-	CONROD	2932	2932	3032	1	.5				
456-	CONROD	2933	2933	3033	1	.5				
457-	CONROD	2954	2954	3054	1	1.871				
458-	CONROD	2957	2957	3057	1	.266				
459-	CONROD	2958	2959	3057	1	.255				
460-	CONROD	2959	2959	3061	1	.255				
461-	CONROD	2961	2961	3061	1	.510				
462-	CONROD	2962	2962	3061	1	.255				
463-	CONROD	2963	2962	3064	1	.255				
464-	CONROD	2964	2964	3064	1	1.260				
465-	CONROD	2965	2965	3065	1	1.260				
466-	CONROD	2966	2967	3065	1	.255				
467-	CONROD	2967	2967	3069	1	.255				
468-	CONROD	2969	2969	3069	1	.510				
469-	CONROD	2970	2971	3069	1	.255				
470-	CONROD	2971	2971	3073	1	.255				
471-	CONROD	2973	2973	3073	1	.680				
472-	CONROD	2976	2976	3076	1	.340				
473-	CONROD	2978	2978	3078	1	2.782				
474-	CONROD	2979	2979	3079	1	.25				
475-	CONROD	2980	2980	3080	1	.25				
476-	CONROD	2981	2981	3081	1	.5				
477-	CONROD	2982	2982	3082	1	.5				
478-	CONROD	3004	3004	3104	1	1.387				
479-	CONROD	3007	3007	3107	1	1.093				
480-	CONROD	3011	3011	3111	1	1.640				
481-	CONROD	3014	3014	3114	1	2.712				
482-	CONROD	3015	3015	3115	1	2.712				
483-	CONROD	3019	3019	3119	1	2.187				
484-	CONROD	3023	3023	3123	1	1.640				
485-	CONROD	3028	3028	3128	1	3.477				
486-	CONROD	3029	3029	3229	4	.25				
487-	CONROD	3030	3030	3230	4	.25				
488-	CONROD	3031	3031	3131	1	.5				
489-	CONROD	3032	3032	3132	1	.5				
490-	CONROD	3033	3033	3133	1	.5				
491-	CONROD	3054	3054	3154	1	1.670				
492-	CONROD	3057	3057	3157	1	.448				
493-	CONROD	3061	3061	3161	1	.669				
494-	CONROD	3064	3064	3164	1	1.196				
495-	CONROD	3065	3065	3165	1	1.142				
496-	CONROD	3069	3069	3169	1	.782				
497-	CONROD	3073	3073	3173	1	.589				
498-	CONROD	3078	3078	3178	1	3.665				
499-	CONROD	3079	3079	3279	1	.25				
500-	CONROD	3080	3080	3280	1	.25				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
501-	CONROD	3081	3081	3181	1	.5				
502-	CONROD	3082	3082	3182	1	.5				
503-	CONROD	3104	3104	3204	1	1.872				
504-	CONROD	3111	3111	3211	1	2.044				
505-	CONROD	3114	3114	3214	1	2.550				
506-	CONROD	3115	3115	3215	1	2.550				
507-	CONROD	3119	3119	3219	1	2.058				
508-	CONROD	3123	3123	3223	1	2.044				
509-	CONROD	3128	3128	3228	1	2.802				
510-	CONROD	3154	3154	3254	1	1.817				
511-	CONROD	3161	3161	3261	1	.783				
512-	CONROD	3164	3164	3264	1	1.143				
513-	CONROD	3165	3165	3265	1	.857				
514-	CONROD	3169	3169	3269	1	.401				
515-	CONROD	3173	3173	3273	1	.618				
516-	CONROD	3178	3178	3278	1	3.508				
517-	CONROD	3204	3204	3304	1	1.710				
518-	CONROD	3211	3211	3311	1	1.843				
519-	CONROD	3214	3214	3314	1	2.350				
520-	CONROD	3215	3215	3315	1	2.350				
521-	CONROD	3219	3219	3319	1	1.903				
522-	CONROD	3223	3223	3323	1	1.903				
523-	CONROD	3228	3228	3328	1	2.688				
524-	CONROD	3229	3229	3329	4	.25				
525-	CONROD	3230	3230	3330	4	.25				
526-	CONROD	3231	3231	3331	1	.5				
527-	CONROD	3232	3232	3332	1	.5				
528-	CONROD	3233	3233	3333	1	.5				
529-	CONROD	3254	3254	3354	1	1.650				
530-	CONROD	3261	3261	3361	1	.660				
531-	CONROD	3264	3264	3364	1	1.179				
532-	CONROD	3265	3265	3365	1	.925				
533-	CONROD	3269	3269	3369	1	.448				
534-	CONROD	3273	3273	3373	1	.603				
535-	CONROD	3278	3278	3378	1	2.820				
536-	CONROD	3279	3279	3379	1	.25				
537-	CONROD	3280	3280	3380	1	.25				
538-	CONROD	3281	3281	3381	1	.5				
539-	CONROD	3282	3282	3382	1	.5				
540-	CONROD	3304	3304	3404	1	1.433				
541-	CONROD	3311	3311	3411	1	1.479				
542-	CONROD	3314	3314	3414	1	2.153				
543-	CONROD	3315	3315	3415	1	2.153				
544-	CONROD	3319	3319	3419	1	1.750				
545-	CONROD	3323	3323	3423	1	1.750				
546-	CONROD	3328	3328	3428	1	2.564				
547-	CONROD	3329	3329	3529	4	.25				
548-	CONROD	3330	3330	3530	4	.25				
549-	CONROD	3331	3331	3431	1	.5				
550-	CONROD	3332	3332	3432	1	.5				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
551-	CONROD	3333	3333	3433	1	.5				
552-	CONROD	3354	3354	3454	1	1.500				
553-	CONROD	3361	3361	3461	1	.552				
554-	CONROD	3364	3364	3464	1	1.110				
555-	CONROD	3365	3365	3465	1	1.109				
556-	CONROD	3369	3369	3469	1	.719				
557-	CONROD	3373	3373	3473	1	.697				
558-	CONROD	3378	3378	3478	1	2.425				
559-	CONROD	3379	3379	3579	1	.25				
560-	CONROD	3380	3380	3580	1	.25				
561-	CONROD	3381	3381	3481	1	.5				
562-	CONROD	3382	3382	3482	1	.5				
563-	CONROD	3404	3404	3504	1	1.251				
564-	CONROD	3411	3411	3511	1	1.093				
565-	CONROD	3414	3414	3514	1	1.970				
566-	CONROD	3415	3415	3515	1	1.970				
567-	CONROD	3419	3419	3519	1	1.608				
568-	CONROD	3423	3423	3523	1	1.608				
569-	CONROD	3428	3428	3528	1	2.410				
570-	CONROD	3454	3454	3554	1	1.465				
571-	CONROD	3461	3461	3561	1	.525				
572-	CONROD	3464	3464	3564	1	1.351				
573-	CONROD	3465	3465	3565	1	1.179				
574-	CONROD	3469	3469	3569	1	.700				
575-	CONROD	3473	3473	3573	1	.683				
576-	CONROD	3478	3478	3578	1	2.168				
577-	CONROD	3504	3504	3604	1	1.230				
578-	CONROD	3511	3511	3611	1	.651				
579-	CONROD	3514	3514	3614	1	1.825				
580-	CONROD	3515	3515	3615	1	1.825				
581-	CONROD	3519	3519	3619	1	1.510				
582-	CONROD	3523	3523	3623	1	1.510				
583-	CONROD	3528	3528	3628	1	2.221				
584-	CONROD	3529	3529	3629	4	.25				
585-	CONROD	3530	3530	3630	4	.25				
586-	CONROD	3531	3531	3631	1	.5				
587-	CONROD	3532	3532	3632	1	.5				
588-	CONROD	3533	3533	3633	1	.5				
589-	CONROD	3554	3554	3654	1	1.429				
590-	CONROD	3561	3561	3661	1	.491				
591-	CONROD	3564	3564	3664	1	1.392				
592-	CONROD	3565	3565	3665	1	.919				
593-	CONROD	3569	3569	3669	1	.658				
594-	CONROD	3573	3573	3673	1	.658				
595-	CONROD	3578	3578	3678	1	1.896				
596-	CONROD	3579	3579	3679	1	.25				
597-	CONROD	3580	3580	3680	1	.25				
598-	CONROD	3581	3581	3681	1	.5				
599-	CONROD	3582	3582	3682	1	.5				
600-	CONROD	3604	3604	3704	1	1.216				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
601-	CONROD	3611	3611	3711	1	.363				
602-	CONROD	3614	3614	3714	1	1.711				
603-	CONROD	3615	3615	3715	1	1.711				
604-	CONROD	3619	3619	3719	1	1.447				
605-	CONROD	3623	3623	3723	1	1.215				
606-	CONROD	3628	3628	3728	1	1.801				
607-	CONROD	3629	3629	3829	4	.25				
608-	CONROD	3630	3630	3830	4	.25				
609-	CONROD	3631	3631	3731	1	.5				
610-	CONROD	3632	3632	3732	1	.5				
611-	CONROD	3633	3633	3733	1	.5				
612-	CONROD	3654	3654	3754	1	1.392				
613-	CONROD	3661	3661	3761	1	.623				
614-	CONROD	3664	3664	3764	1	1.040				
615-	CONROD	3665	3665	3765	1	1.038				
616-	CONROD	3669	3669	3769	1	.598				
617-	CONROD	3673	3673	3773	1	.598				
618-	CONROD	3678	3678	3778	1	1.784				
619-	CONROD	3679	3679	3879	1	.25				
620-	CONROD	3680	3680	3880	1	.25				
621-	CONROD	3681	3681	3781	1	.5				
622-	CONROD	3682	3682	3782	1	.5				
623-	CONROD	3704	3704	3804	1	1.348				
624-	CONROD	3714	3714	3814	1	1.678				
625-	CONROD	3715	3715	3815	1	1.585				
626-	CONROD	3719	3719	3819	1	1.356				
627-	CONROD	3723	3723	3823	1	1.018				
628-	CONROD	3728	3728	3828	1	1.534				
629-	CONROD	3754	3754	3854	1	1.489				
630-	CONROD	3764	3764	3864	1	.950				
631-	CONROD	3765	3765	3865	1	.940				
632-	CONROD	3769	3769	3869	1	.525				
633-	CONROD	3773	3773	3873	1	.520				
634-	CONROD	3778	3778	3878	1	1.620				
635-	CONROD	3804	3804	3904	1	1.394				
636-	CONROD	3814	3814	3914	1	1.366				
637-	CONROD	3815	3815	3915	1	1.455				
638-	CONROD	3819	3819	3919	1	1.245				
639-	CONROD	3823	3823	3923	1	.935				
640-	CONROD	3828	3828	3928	1	1.441				
641-	CONROD	3829	3829	3929	4	.25				
642-	CONROD	3830	3830	3930	4	.25				
643-	CONROD	3831	3831	3931	1	.5				
644-	CONROD	3832	3832	3932	1	.5				
645-	CONROD	3833	3833	3933	1	.5				
646-	CONROD	3854	3854	3954	1	1.452				
647-	CONROD	3864	3864	3964	1	.797				
648-	CONROD	3865	3865	3965	1	.652				
649-	CONROD	3869	3869	3969	1	.334				
650-	CONROD	3873	3873	3973	1	.434				

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
651-	CONROD	3878	3878	3978	1	1.383				
652-	CONROD	3879	3879	3979	1	.25				
653-	CONROD	3880	3880	3980	1	.25				
654-	CONROD	3881	3881	3981	1	.5				
655-	CONROD	3882	3882	3982	1	.5				
656-	CONROD	3904	3904	4004	1	1.149				
657-	CONROD	3914	3914	4014	1	1.045				
658-	CONROD	3915	3915	4015	1	1.329				
659-	CONROD	3919	3919	4019	1	1.137				
660-	CONROD	3923	3923	4023	1	.854				
661-	CONROD	3928	3928	4028	1	1.381				
662-	CONROD	3929	3929	4129	4	.25				
663-	CONROD	3930	3930	4130	4	.25				
664-	CONROD	3931	3931	4031	1	.5				
665-	CONROD	3932	3932	4032	1	.5				
666-	CONROD	3933	3933	4033	1	.5				
667-	CONROD	3954	3954	4054	1	1.352				
668-	CONROD	3964	3964	4064	1	.620				
669-	CONROD	3965	3965	4065	1	.542				
670-	CONROD	3969	3969	4069	1	.325				
671-	CONROD	3973	3973	4073	1	.367				
672-	CONROD	3978	3978	4078	1	1.254				
673-	CONROD	3979	3979	4179	1	.25				
674-	CONROD	3980	3980	4180	1	.25				
675-	CONROD	3981	3981	4081	1	.5				
676-	CONROD	3982	3982	4082	1	.5				
677-	CONROD	4004	4004	4104	1	1.145				
678-	CONROD	4014	4014	4114	1	.946				
679-	CONROD	4015	4015	4115	1	1.329				
680-	CONROD	4019	4019	4119	1	1.137				
681-	CONROD	4023	4023	4123	1	.854				
682-	CONROD	4028	4028	4128	1	1.381				
683-	CONROD	4054	4054	4154	1	1.256				
684-	CONROD	4064	4064	4164	1	.631				
685-	CONROD	4065	4065	4165	1	.753				
686-	CONROD	4069	4069	4169	1	.482				
687-	CONROD	4073	4073	4173	1	.370				
688-	CONROD	4078	4078	4178	1	1.185				
689-	CONROD	4104	4104	4204	1	1.139				
690-	CONROD	4114	4114	4214	1	.793				
691-	CONROD	4115	4115	4215	1	1.104				
692-	CONROD	4119	4119	4219	1	.937				
693-	CONROD	4123	4123	4223	1	.703				
694-	CONROD	4128	4128	4228	1	1.256				
695-	CONROD	4129	4129	4229	1	.4				
696-	CONROD	4130	4130	4230	1	.5				
697-	CONROD	4132	4132	4232	1	.4				
698-	CONROD	4133	4133	4233	1	.4				
699-	CONROD	4154	4154	4254	1	1.222				
700-	CONROD	4164	4164	4264	1	.853				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
701-	CONROD	4165	4165	4265	1	.725				
702-	CONROD	4169	4169	4269	1	.508				
703-	CONROD	4173	4173	4273	1	.381				
704-	CONROD	4178	4178	4278	1	1.177				
705-	CONROD	4179	4179	4279	1	.4				
706-	CONROD	4180	4180	4280	1	.5				
707-	CONROD	4182	4182	4282	1	.4				
708-	CONROD	4204	4204	4304	1	1.131				
709-	CONROD	4214	4214	4314	1	.531				
710-	CONROD	4215	4215	4315	1	1.025				
711-	CONROD	4219	4219	4319	1	.857				
712-	CONROD	4223	4223	4323	1	.643				
713-	CONROD	4228	4228	4328	1	1.193				
714-	CONROD	4229	4229	4329	1	.4				
715-	CONROD	4230	4230	4330	1	.5				
716-	CONROD	4232	4232	4332	1	.4				
717-	CONROD	4233	4233	4333	1	.4				
718-	CONROD	4254	4254	4354	1	1.188				
719-	CONROD	4264	4264	4364	1	.614				
720-	CONROD	4265	4265	4365	1	.872				
721-	CONROD	4269	4269	4369	1	.516				
722-	CONROD	4273	4273	4373	1	.387				
723-	CONROD	4278	4278	4378	1	1.189				
724-	CONROD	4279	4279	4379	1	.4				
725-	CONROD	4280	4280	4380	1	.5				
726-	CONROD	4282	4282	4382	1	.4				
727-	CONROD	4304	4304	4404	1	1.496				
728-	CONROD	4315	4315	4415	1	.938				
729-	CONROD	4319	4319	4419	1	.759				
730-	CONROD	4323	4323	4423	1	.569				
731-	CONROD	4328	4328	4428	1	1.172				
732-	CONROD	4329	4329	4429	1	.4				
733-	CONROD	4330	4330	4430	1	.5				
734-	CONROD	4332	4332	4432	1	.4				
735-	CONROD	4333	4333	4433	1	.4				
736-	CONROD	4354	4354	4454	1	1.405				
737-	CONROD	4365	4365	4465	1	1.090				
738-	CONROD	4369	4369	4469	1	.520				
739-	CONROD	4373	4373	4473	1	.390				
740-	CONROD	4378	4378	4478	1	1.151				
741-	CONROD	4379	4379	4479	1	.4				
742-	CONROD	4380	4380	4480	1	.5				
743-	CONROD	4382	4382	4482	1	.4				
744-	CONROD	4404	4404	4504	1	1.466				
745-	CONROD	4415	4415	4515	1	.753				
746-	CONROD	4419	4419	4519	1	.517				
747-	CONROD	4423	4423	4523	1	.692				
748-	CONROD	4428	4428	4528	1	1.151				
749-	CONROD	4429	4429	4529	1	.4				
750-	CONROD	4430	4430	4530	1	.5				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
751-	CONROD	4432	4432	4532	1	.4				
752-	CONROD	4433	4433	4533	1	.4				
753-	CONROD	4454	4454	4554	1	1.508				
754-	CONROD	4465	4465	4565	1	.824				
755-	CONROD	4469	4469	4569	1	.518				
756-	CONROD	4473	4473	4573	1	.391				
757-	CONROD	4478	4478	4578	1	1.109				
758-	CONROD	4479	4479	4579	1	.4				
759-	CONROD	4480	4480	4580	1	.5				
760-	CONROD	4482	4482	4582	1	.4				
761-	CONROD	4504	4504	4604	1	1.402				
762-	CONROD	4515	4515	4615	1	.506				
763-	CONROD	4519	4519	4619	1	.301				
764-	CONROD	4523	4523	4623	1	.226				
765-	CONROD	4528	4528	4628	1	1.127				
766-	CONROD	4529	4529	4629	1	.4				
767-	CONROD	4530	4530	4630	1	.5				
768-	CONROD	4532	4532	4632	1	.4				
769-	CONROD	4533	4533	4633	1	.4				
770-	CONROD	4554	4554	4654	1	1.379				
771-	CONROD	4565	4565	4665	1	.606				
772-	CONROD	4569	4569	4669	1	.328				
773-	CONROD	4573	4573	4673	1	.245				
774-	CONROD	4578	4578	4678	1	1.087				
775-	CONROD	4579	4579	4679	1	.4				
776-	CONROD	4580	4580	4680	1	.5				
777-	CONROD	4582	4582	4682	1	.4				
778-	CONROD	4604	4604	4704	1	0.817				
779-	CONROD	4615	4615	4715	1	.946				
780-	CONROD	4619	4619	4719	1	.784				
781-	CONROD	4623	4623	4723	1	.608				
782-	CONROD	4628	4628	4728	1	.938				
783-	CONROD	4629	4629	4729	1	.4				
784-	CONROD	4630	4630	4730	1	.5				
785-	CONROD	4632	4632	4732	1	.4				
786-	CONROD	4633	4633	4733	1	.4				
787-	CONROD	4654	4654	4754	1	0.875				
788-	CONROD	4665	4665	4765	1	.267				
789-	CONROD	4669	4669	4769	1	.325				
790-	CONROD	4673	4673	4773	1	.174				
791-	CONROD	4678	4678	4778	1	1.157				
792-	CONROD	4679	4679	4779	1	.4				
793-	CONROD	4680	4680	4780	1	.5				
794-	CONROD	4682	4682	4782	1	.4				
795-	CONROD	4704	4704	4804	1	.500				
796-	CONROD	4728	4728	4828	1	.500				
797-	CONROD	4754	4754	4804	1	.500				
798-	CONROD	4778	4778	4828	1	.500				
799-	CONROD	11803	1803	1804	2	2.360				
800-	CONROD	11804	1804	1807	2	2.360				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
801-	CONROD	11807	1807	1811	2	2.360				
802-	CONROD	11811	1811	1814	2	2.360				
803-	CONROD	11814	1814	1815	2	2.360				
804-	CONROD	11815	1815	1819	2	2.360				
805-	CONROD	11819	1819	1823	2	2.360				
806-	CONROD	11823	1823	1826	2	2.360				
807-	CONROD	11826	1826	1828	2	2.360				
808-	CONROD	11828	1828	1829	2	2.360				
809-	CONROD	11853	1853	1854	2	2.805				
810-	CONROD	11854	1854	1857	2	2.805				
811-	CONROD	11857	1857	1861	2	2.805				
812-	CONROD	11861	1861	1864	2	2.805				
813-	CONROD	11864	1864	1865	2	2.805				
814-	CONROD	11865	1865	1869	2	2.805				
815-	CONROD	11869	1869	1873	2	2.805				
816-	CONROD	11873	1873	1876	2	2.805				
817-	CONROD	11876	1876	1878	2	2.805				
818-	CONROD	11878	1878	1879	2	2.805				
819-	CONROD	12000	2000	2004	2	1.485				
820-	CONROD	12001	2001	2002	1	1.65				
821-	CONROD	12002	2002	2003	1	1.65				
822-	CONROD	12004	2004	2007	2	1.485				
823-	CONROD	12007	2007	2011	2	1.485				
824-	CONROD	12011	2011	2014	2	1.485				
825-	CONROD	12014	2014	2015	2	1.485				
826-	CONROD	12015	2015	2019	2	1.485				
827-	CONROD	12019	2019	2023	2	1.485				
828-	CONROD	12023	2023	2026	2	1.485				
829-	CONROD	12026	2026	2028	2	1.485				
830-	CONROD	12028	2028	2029	2	.324				
831-	CONROD	12029	2029	2030	4	.5				
832-	CONROD	12030	2030	2032	4	.5				
833-	CONROD	12050	2050	2054	2	1.485				
834-	CONROD	12051	2051	2052	1	1.65				
835-	CONROD	12052	2052	2053	1	1.65				
836-	CONROD	12054	2054	2057	2	1.485				
837-	CONROD	12057	2057	2061	2	1.485				
838-	CONROD	12061	2061	2064	2	1.485				
839-	CONROD	12064	2064	2065	2	1.485				
840-	CONROD	12065	2065	2069	2	1.485				
841-	CONROD	12069	2069	2073	2	1.485				
842-	CONROD	12073	2073	2076	2	1.485				
843-	CONROD	12076	2076	2078	2	1.485				
844-	CONROD	12078	2078	2079	2	1.485				
845-	CONROD	12079	2079	2080	4	.5				
846-	CONROD	12080	2080	2082	4	.5				
847-	CONROD	12128	2128	2129	4	.324				
848-	CONROD	12129	2129	2130	4	.5				
849-	CONROD	12130	2130	2132	4	.5				
850-	CONROD	12132	2132	2133	4	.5				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
851-	CONROD	12178	2178	2179	4	.100				
852-	CONROD	12179	2179	2180	4	.5				
853-	CONROD	12180	2180	2182	4	.5				
854-	CONROD	12182	2182	2183	4	.5				
855-	CONROD	12201	2201	2202	1	1.58				
856-	CONROD	12202	2202	2203	1	1.58				
857-	CONROD	12228	2228	2229	3	1.918				
858-	CONROD	12229	2229	2230	3	1.918				
859-	CONROD	12230	2230	2232	3	.959				
860-	CONROD	12232	2232	2233	3	.959				
861-	CONROD	12251	2251	2252	1	1.58				
862-	CONROD	12252	2252	2253	1	1.58				
863-	CONROD	12278	2278	2279	3	1.504				
864-	CONROD	12279	2279	2280	3	1.504				
865-	CONROD	12280	2280	2282	3	.752				
866-	CONROD	12282	2282	2233	3	.752				
867-	CONROD	12328	2328	2429	4	.750				
868-	CONROD	12331	2331	2332	3	.959				
869-	CONROD	12332	2332	2333	3	.959				
870-	CONROD	12378	2378	2479	4	.600				
871-	CONROD	12381	2381	2382	3	.752				
872-	CONROD	12382	2382	2333	3	.752				
873-	CONROD	12401	2401	2402	1	.83				
874-	CONROD	12402	2402	2403	1	.83				
875-	CONROD	12428	2428	2429	4	.742				
876-	CONROD	12429	2429	2430	4	.5				
877-	CONROD	12431	2431	2432	1	.5				
878-	CONROD	12432	2432	2433	1	.5				
879-	CONROD	12451	2451	2452	1	.83				
880-	CONROD	12452	2452	2453	1	.83				
881-	CONROD	12478	2478	2479	4	1.167				
882-	CONROD	12479	2479	2480	4	.5				
883-	CONROD	12481	2481	2482	1	.5				
884-	CONROD	12482	2482	2433	1	.5				
885-	CONROD	12501	2501	2502	1	.83				
886-	CONROD	12502	2502	2503	1	.83				
887-	CONROD	12528	2528	2529	3	2.581				
888-	CONROD	12529	2529	2530	3	2.581				
889-	CONROD	12531	2531	2532	3	1.290				
890-	CONROD	12532	2532	2533	3	1.290				
891-	CONROD	12551	2551	2552	1	.83				
892-	CONROD	12552	2552	2553	1	.83				
893-	CONROD	12578	2578	2579	3	2.056				
894-	CONROD	12579	2579	2580	3	2.056				
895-	CONROD	12581	2581	2582	3	1.028				
896-	CONROD	12582	2582	2533	3	1.028				
897-	CONROD	12601	2601	2602	1	2.36				
898-	CONROD	12602	2602	2603	1	2.36				
899-	CONROD	12628	2628	2729	4	.645				
900-	CONROD	12631	2631	2632	3	1.290				

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
901-	CONROD	12632	2632	2633	3	1.290				
902-	CONROD	12651	2651	2652	1	2.36				
903-	CONROD	12652	2652	2653	1	2.36				
904-	CONROD	12678	2678	2779	4	.990				
905-	CONROD	12681	2681	2682	3	1.028				
906-	CONROD	12682	2682	2633	3	1.028				
907-	CONROD	12729	2729	2730	4	.5				
908-	CONROD	12731	2731	2732	1	.5				
909-	CONROD	12732	2732	2733	1	.5				
910-	CONROD	12779	2779	2780	4	.5				
911-	CONROD	12781	2781	2782	1	.5				
912-	CONROD	12782	2782	2733	1	.5				
913-	CONROD	12801	2801	2802	1	.84				
914-	CONROD	12802	2802	2803	1	.84				
915-	CONROD	12828	2828	2729	4	.608				
916-	CONROD	12831	2831	2832	3	.959				
917-	CONROD	12832	2832	2833	3	.959				
918-	CONROD	12851	2851	2852	1	.84				
919-	CONROD	12852	2852	2853	1	.84				
920-	CONROD	12878	2878	2779	4	.605				
921-	CONROD	12881	2881	2882	3	.771				
922-	CONROD	12882	2882	2833	3	.771				
923-	CONROD	12901	2901	2902	1	.84				
924-	CONROD	12902	2902	2903	1	.84				
925-	CONROD	12928	2928	2929	3	1.918				
926-	CONROD	12929	2929	2930	3	1.918				
927-	CONROD	12931	2931	2932	3	.959				
928-	CONROD	12932	2932	2933	3	.959				
929-	CONROD	12951	2951	2952	1	.84				
930-	CONROD	12952	2952	2953	1	.84				
931-	CONROD	12978	2978	2979	3	1.542				
932-	CONROD	12979	2979	2980	3	1.542				
933-	CONROD	12981	2981	2982	3	.771				
934-	CONROD	12982	2982	2933	3	.771				
935-	CONROD	13001	3001	3002	1	1.13				
936-	CONROD	13002	3002	3003	1	1.13				
937-	CONROD	13028	3028	3029	4	.525				
938-	CONROD	13029	3029	3030	4	.5				
939-	CONROD	13031	3031	3032	1	.5				
940-	CONROD	13032	3032	3033	1	.5				
941-	CONROD	13051	3051	3052	1	1.13				
942-	CONROD	13052	3052	3053	1	1.13				
943-	CONROD	13078	3078	3079	4	.495				
944-	CONROD	13079	3079	3080	4	.5				
945-	CONROD	13081	3081	3082	1	.5				
946-	CONROD	13082	3082	3033	1	.5				
947-	CONROD	13101	3101	3102	1	1.13				
948-	CONROD	13102	3102	3103	1	1.13				
949-	CONROD	13128	3128	3029	4	.462				
950-	CONROD	13131	3131	3132	3	.959				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
951-	CONROD	13132	3132	3133	3	.959				
952-	CONROD	13151	3151	3152	1	1.13				
953-	CONROD	13152	3152	3153	1	1.13				
954-	CONROD	13178	3178	3079	4	.652				
955-	CONROD	13181	3181	3182	3	.771				
956-	CONROD	13182	3182	3133	3	.771				
957-	CONROD	13201	3201	3202	1	.80				
958-	CONROD	13202	3202	3203	1	.80				
959-	CONROD	13228	3228	3229	3	1.918				
960-	CONROD	13229	3229	3230	3	1.918				
961-	CONROD	13231	3231	3232	3	.959				
962-	CONROD	13232	3232	3233	3	.959				
963-	CONROD	13251	3251	3252	1	.80				
964-	CONROD	13252	3252	3253	1	.80				
965-	CONROD	13278	3278	3279	3	1.542				
966-	CONROD	13279	3279	3280	3	1.542				
967-	CONROD	13281	3281	3282	3	.771				
968-	CONROD	13282	3282	3233	3	.771				
969-	CONROD	13301	3301	3302	1	.80				
970-	CONROD	13302	3302	3303	1	.80				
971-	CONROD	13328	3328	3329	4	.385				
972-	CONROD	13329	3329	3330	4	.5				
973-	CONROD	13331	3331	3332	1	.5				
974-	CONROD	13332	3332	3333	1	.5				
975-	CONROD	13351	3351	3352	1	.80				
976-	CONROD	13352	3352	3353	1	.80				
977-	CONROD	13378	3378	3379	4	.491				
978-	CONROD	13379	3379	3380	4	.5				
979-	CONROD	13381	3381	3382	1	.5				
980-	CONROD	13382	3382	3333	1	.5				
981-	CONROD	13401	3401	3402	1	2.24				
982-	CONROD	13402	3402	3403	1	2.24				
983-	CONROD	13428	3428	3329	4	.364				
984-	CONROD	13431	3431	3432	3	.940				
985-	CONROD	13432	3432	3433	3	.940				
986-	CONROD	13451	3451	3452	1	2.24				
987-	CONROD	13452	3452	3453	1	2.24				
988-	CONROD	13478	3478	3379	4	.319				
989-	CONROD	13481	3481	3482	3	.752				
990-	CONROD	13482	3482	3433	3	.752				
991-	CONROD	13501	3501	3502	1	.83				
992-	CONROD	13502	3502	3503	1	.83				
993-	CONROD	13528	3528	3529	3	1.880				
994-	CONROD	13529	3529	3530	3	1.880				
995-	CONROD	13531	3531	3532	3	.940				
996-	CONROD	13532	3532	3533	3	.940				
997-	CONROD	13551	3551	3552	1	.83				
998-	CONROD	13552	3552	3553	1	.83				
999-	CONROD	13578	3578	3579	3	1.504				
1000-	CONROD	13579	3579	3580	3	1.504				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
1001-	CONROD	13581	3581	3582	3	.752				
1002-	CONROD	13582	3582	3533	3	.752				
1003-	CONROD	13601	3601	3602	1	.83				
1004-	CONROD	13602	3602	3603	1	.83				
1005-	CONROD	13628	3628	3629	4	.120				
1006-	CONROD	13629	3629	3630	4	.5				
1007-	CONROD	13631	3631	3632	1	.5				
1008-	CONROD	13632	3632	3633	1	.5				
1009-	CONROD	13651	3651	3652	1	.83				
1010-	CONROD	13652	3652	3653	1	.83				
1011-	CONROD	13678	3678	3679	4	.508				
1012-	CONROD	13679	3679	3680	4	.5				
1013-	CONROD	13681	3681	3682	1	.5				
1014-	CONROD	13682	3682	3633	1	.5				
1015-	CONROD	13701	3701	3702	1	1.13				
1016-	CONROD	13702	3702	3703	1	1.13				
1017-	CONROD	13728	3728	3629	4	.234				
1018-	CONROD	13731	3731	3732	3	.812				
1019-	CONROD	13732	3732	3733	3	.812				
1020-	CONROD	13751	3751	3752	1	1.13				
1021-	CONROD	13752	3752	3753	1	1.13				
1022-	CONROD	13778	3778	3679	4	.305				
1023-	CONROD	13781	3781	3782	3	.650				
1024-	CONROD	13782	3782	3733	3	.650				
1025-	CONROD	13801	3801	3802	1	1.13				
1026-	CONROD	13802	3802	3803	1	1.13				
1027-	CONROD	13828	3828	3829	3	1.625				
1028-	CONROD	13829	3829	3830	3	1.625				
1029-	CONROD	13831	3831	3832	3	.812				
1030-	CONROD	13832	3832	3833	3	.812				
1031-	CONROD	13851	3851	3852	1	1.13				
1032-	CONROD	13852	3852	3853	1	1.13				
1033-	CONROD	13878	3878	3879	3	1.300				
1034-	CONROD	13879	3879	3880	3	1.300				
1035-	CONROD	13881	3881	3882	3	.650				
1036-	CONROD	13882	3882	3833	3	.650				
1037-	CONROD	13901	3901	3902	1	.82				
1038-	CONROD	13902	3902	3903	1	.82				
1039-	CONROD	13928	3928	3929	4	.215				
1040-	CONROD	13929	3929	3930	4	.5				
1041-	CONROD	13931	3931	3932	1	.5				
1042-	CONROD	13932	3932	3933	1	.5				
1043-	CONROD	13951	3951	3952	1	.82				
1044-	CONROD	13952	3952	3953	1	.82				
1045-	CONROD	13978	3978	3979	4	.563				
1046-	CONROD	13979	3979	3980	4	.5				
1047-	CONROD	13981	3981	3982	1	.5				
1048-	CONROD	13982	3982	3933	1	.5				
1049-	CONROD	14001	4001	4002	1	.82				
1050-	CONROD	14002	4002	4003	1	.82				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1051-	CONROD	14028	4028	3929	4	.203				
1052-	CONROD	14031	4031	4032	3	.710				
1053-	CONROD	14032	4032	4033	3	.710				
1054-	CONROD	14051	4051	4052	1	.82				
1055-	CONROD	14052	4052	4053	1	.82				
1056-	CONROD	14078	4078	3979	4	.350				
1057-	CONROD	14081	4081	4082	3	.536				
1058-	CONROD	14082	4082	4033	3	.536				
1059-	CONROD	14101	4101	4102	1	2.12				
1060-	CONROD	14102	4102	4103	1	2.12				
1061-	CONROD	14128	4128	4129	3	1.420				
1062-	CONROD	14129	4129	4130	3	1.420				
1063-	CONROD	14130	4130	4132	3	.710				
1064-	CONROD	14132	4132	4133	3	.710				
1065-	CONROD	14151	4151	4152	1	2.12				
1066-	CONROD	14152	4152	4153	1	2.12				
1067-	CONROD	14178	4178	4179	3	1.073				
1068-	CONROD	14179	4179	4180	3	1.073				
1069-	CONROD	14180	4180	4182	3	.536				
1070-	CONROD	14182	4182	4133	3	.536				
1071-	CONROD	14201	4201	4202	1	.68				
1072-	CONROD	14202	4202	4203	1	.68				
1073-	CONROD	14228	4228	4229	4	.188				
1074-	CONROD	14229	4229	4230	1	.4				
1075-	CONROD	14230	4230	4232	1	.4				
1076-	CONROD	14232	4232	4233	1	.4				
1077-	CONROD	14251	4251	4252	1	.68				
1078-	CONROD	14252	4252	4253	1	.68				
1079-	CONROD	14278	4278	4279	4	.084				
1080-	CONROD	14279	4279	4280	1	.4				
1081-	CONROD	14280	4280	4282	1	.4				
1082-	CONROD	14282	4282	4233	1	.4				
1083-	CONROD	14301	4301	4302	1	.68				
1084-	CONROD	14302	4302	4303	1	.68				
1085-	CONROD	14328	4328	4329	4	.188				
1086-	CONROD	14329	4329	4330	1	.4				
1087-	CONROD	14330	4330	4332	1	.4				
1088-	CONROD	14332	4332	4333	1	.4				
1089-	CONROD	14351	4351	4352	1	.68				
1090-	CONROD	14352	4352	4353	1	.68				
1091-	CONROD	14378	4378	4379	4	.346				
1092-	CONROD	14379	4379	4380	1	.4				
1093-	CONROD	14380	4380	4382	1	.4				
1094-	CONROD	14382	4382	4333	1	.4				
1095-	CONROD	14401	4401	4402	1	.50				
1096-	CONROD	14402	4402	4403	1	.50				
1097-	CONROD	14428	4428	4429	4	.188				
1098-	CONROD	14429	4429	4430	1	.4				
1099-	CONROD	14430	4430	4432	1	.4				
1100-	CONROD	14432	4432	4433	1	.4				

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6 .. 7 .. 8 .. 9 .. 10 .
1101-	CONROD	14451	4451	4452	1	.50
1102-	CONROD	14452	4452	4453	1	.50
1103-	CONROD	14478	4478	4479	4	.200
1104-	CONROD	14479	4479	4480	1	.4
1105-	CONROD	14480	4480	4482	1	.4
1106-	CONROD	14482	4482	4433	1	.4
1107-	CONROD	14501	4501	4502	1	.50
1108-	CONROD	14502	4502	4503	1	.50
1109-	CONROD	14528	4528	4529	4	.188
1110-	CONROD	14529	4529	4530	1	.4
1111-	CONROD	14530	4530	4532	1	.4
1112-	CONROD	14532	4532	4533	1	.4
1113-	CONROD	14551	4551	4552	1	.50
1114-	CONROD	14552	4552	4553	1	.50
1115-	CONROD	14578	4578	4579	4	.320
1116-	CONROD	14579	4579	4580	1	.4
1117-	CONROD	14580	4580	4582	1	.4
1118-	CONROD	14582	4582	4533	1	.4
1119-	CONROD	14601	4601	4602	1	.89
1120-	CONROD	14602	4602	4603	1	.89
1121-	CONROD	14611	4611	4612	1	.50
1122-	CONROD	14612	4612	4604	1	.50
1123-	CONROD	14628	4628	4629	4	.300
1124-	CONROD	14629	4629	4630	1	.4
1125-	CONROD	14630	4630	4632	1	.4
1126-	CONROD	14632	4632	4633	1	.4
1127-	CONROD	14651	4651	4652	1	.89
1128-	CONROD	14652	4652	4653	1	.89
1129-	CONROD	14661	4661	4662	1	.50
1130-	CONROD	14662	4662	4654	1	.50
1131-	CONROD	14678	4678	4679	4	.602
1132-	CONROD	14679	4679	4680	1	.4
1133-	CONROD	14680	4680	4682	1	.4
1134-	CONROD	14682	4682	4633	1	.4
1135-	CONROD	14701	4701	4702	1	.50
1136-	CONROD	14702	4702	4704	1	.50
1137-	CONROD	14728	4728	4729	4	.188
1138-	CONROD	14729	4729	4730	1	.4
1139-	CONROD	14730	4730	4732	1	.4
1140-	CONROD	14732	4732	4733	1	.4
1141-	CONROD	14751	4751	4752	1	.50
1142-	CONROD	14752	4752	4754	1	.50
1143-	CONROD	14778	4778	4779	4	.200
1144-	CONROD	14779	4779	4780	1	.4
1145-	CONROD	14780	4780	4782	1	.4
1146-	CONROD	14782	4782	4733	1	.4
1147-	CONROD	31803	1803	1853	2	3.0
1148-	CONROD	31804	1804	1854	2	4.5
1149-	CONROD	31807	1807	1857	2	3.3
1150-	CONROD	31811	1811	1861	2	3.8

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
1151-	CONROD	31814	1814	1864	2	4.0				
1152-	CONROD	31815	1815	1865	2	3.5				
1153-	CONROD	31819	1819	1869	2	2.0				
1154-	CONROD	31823	1823	1873	2	2.0				
1155-	CONROD	31826	1826	1876	2	1.5				
1156-	CONROD	31828	1828	1878	2	1.0				
1157-	CONROD	31829	1829	1879	2	1.0				
1158-	CONROD	31904	1904	1954	2	3.0				
1159-	CONROD	31915	1915	1965	2	2.1				
1160-	CONROD	31928	1928	1978	2	1.5				
1161-	CONROD	32001	2001	2051	1	.50				
1162-	CONROD	32002	2002	2052	1	.50				
1163-	CONROD	32003	2003	2053	1	.50				
1164-	CONROD	32007	2007	2057	2	1.8				
1165-	CONROD	32011	2011	2061	2	1.5				
1166-	CONROD	32014	2014	2064	2	2.0				
1167-	CONROD	32015	2015	2065	2	3.0				
1168-	CONROD	32019	2019	2069	2	1.0				
1169-	CONROD	32023	2023	2073	2	1.0				
1170-	CONROD	32026	2026	2076	2	1.5				
1171-	CONROD	32028	2028	2078	2	3.0				
1172-	CONROD	32029	2029	2079	2	.5				
1173-	CONROD	32030	2030	2080	1	.5				
1174-	CONROD	32032	2032	2082	1	.5				
1175-	CONROD	32104	2104	2154	1	3.0				
1176-	CONROD	32107	2107	2157	1	1.0				
1177-	CONROD	32111	2111	2161	1	.8				
1178-	CONROD	32114	2114	2164	1	.8				
1179-	CONROD	32115	2115	2165	1	.8				
1180-	CONROD	32119	2119	2169	1	.8				
1181-	CONROD	32123	2123	2173	1	.8				
1182-	CONROD	32126	2126	2176	1	.5				
1183-	CONROD	32128	2128	2178	1	3.0				
1184-	CONROD	32129	2129	2179	1	.5				
1185-	CONROD	32130	2130	2180	1	.5				
1186-	CONROD	32132	2132	2182	1	.5				
1187-	CONROD	32133	2133	2183	1	.5				
1188-	CONROD	32201	2201	2251	1	.50				
1189-	CONROD	32202	2202	2252	1	.50				
1190-	CONROD	32203	2203	2253	1	.50				
1191-	CONROD	32204	2204	2254	1	2.0				
1192-	CONROD	32207	2207	2257	1	.7				
1193-	CONROD	32211	2211	2261	1	.5				
1194-	CONROD	32214	2214	2264	1	.5				
1195-	CONROD	32215	2215	2265	1	.6				
1196-	CONROD	32219	2219	2269	1	.6				
1197-	CONROD	32223	2223	2273	1	.6				
1198-	CONROD	32226	2226	2276	1	.5				
1199-	CONROD	32228	2228	2278	1	2.0				
1200-	CONROD	32229	2229	2279	3	1.0				

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
1201-	CONROD	32230	2230	2280	3	1.0				
1202-	CONROD	32232	2232	2282	1	.5				
1203-	CONROD	32304	2304	2354	1	2.0				
1204-	CONROD	32307	2307	2357	1	.280				
1205-	CONROD	32311	2311	2361	1	.280				
1206-	CONROD	32314	2314	2364	1	.318				
1207-	CONROD	32315	2315	2365	1	.340				
1208-	CONROD	32319	2319	2369	1	.318				
1209-	CONROD	32323	2323	2373	1	.280				
1210-	CONROD	32326	2326	2376	1	.203				
1211-	CONROD	32328	2328	2378	1	2.0				
1212-	CONROD	32331	2331	2381	3	2.0				
1213-	CONROD	32332	2332	2382	3	2.0				
1214-	CONROD	32401	2401	2451	1	.25				
1215-	CONROD	32402	2402	2452	1	.25				
1216-	CONROD	32403	2403	2453	1	.25				
1217-	CONROD	32404	2404	2454	1	2.471				
1218-	CONROD	32407	2407	2457	1	.684				
1219-	CONROD	32411	2411	2461	1	.684				
1220-	CONROD	32414	2414	2464	1	.714				
1221-	CONROD	32415	2415	2465	1	.744				
1222-	CONROD	32419	2419	2469	1	.684				
1223-	CONROD	32423	2423	2473	1	.684				
1224-	CONROD	32426	2426	2476	1	.513				
1225-	CONROD	32428	2428	2478	1	2.755				
1226-	CONROD	32429	2429	2479	1	.5				
1227-	CONROD	32430	2430	2480	1	.5				
1228-	CONROD	32431	2431	2481	1	.5				
1229-	CONROD	32432	2432	2482	1	.5				
1230-	CONROD	32501	2501	2551	1	.25				
1231-	CONROD	32502	2502	2552	1	.25				
1232-	CONROD	32503	2503	2553	1	.25				
1233-	CONROD	32504	2504	2554	1	2.365				
1234-	CONROD	32507	2507	2557	1	.280				
1235-	CONROD	32509	2509	2559	1	.280				
1236-	CONROD	32511	2511	2561	1	.280				
1237-	CONROD	32512	2512	2562	1	.280				
1238-	CONROD	32514	2514	2564	1	.435				
1239-	CONROD	32515	2515	2565	1	.465				
1240-	CONROD	32517	2517	2567	1	.310				
1241-	CONROD	32519	2519	2569	1	.310				
1242-	CONROD	32521	2521	2571	1	.280				
1243-	CONROD	32523	2523	2573	1	.420				
1244-	CONROD	32526	2526	2576	1	.420				
1245-	CONROD	32528	2528	2578	1	2.400				
1246-	CONROD	32529	2529	2579	3	1.0				
1247-	CONROD	32530	2530	2580	3	1.0				
1248-	CONROD	32531	2531	2581	3	1.0				
1249-	CONROD	32532	2532	2582	3	1.0				
1250-	CONROD	32601	2601	2651	1	.50				

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 .
1251-	CONROD	32602	2602	2652	1	.50				
1252-	CONROD	32603	2603	2653	1	.50				
1253-	CONROD	32604	2604	2654	1	2.180				
1254-	CONROD	32607	2607	2657	1	.265				
1255-	CONROD	32609	2609	2659	1	.265				
1256-	CONROD	32611	2611	2661	1	.265				
1257-	CONROD	32612	2612	2662	1	.265				
1258-	CONROD	32614	2614	2664	1	.405				
1259-	CONROD	32615	2615	2665	1	.420				
1260-	CONROD	32617	2617	2667	1	.280				
1261-	CONROD	32619	2619	2669	1	.280				
1262-	CONROD	32621	2621	2671	1	.265				
1263-	CONROD	32623	2623	2673	1	.398				
1264-	CONROD	32626	2626	2676	1	.398				
1265-	CONROD	32628	2628	2678	1	1.815				
1266-	CONROD	32631	2631	2681	3	1.0				
1267-	CONROD	32632	2632	2682	3	1.0				
1268-	CONROD	32704	2704	2754	1	.780				
1269-	CONROD	32728	2728	2778	1	1.580				
1270-	CONROD	32729	2729	2779	1	.5				
1271-	CONROD	32730	2730	2780	1	.5				
1272-	CONROD	32731	2731	2781	1	.5				
1273-	CONROD	32732	2732	2782	1	.5				
1274-	CONROD	32801	2801	2851	1	.25				
1275-	CONROD	32802	2802	2852	1	.25				
1276-	CONROD	32803	2803	2853	1	.25				
1277-	CONROD	32804	2804	2854	1	2.040				
1278-	CONROD	32807	2807	2857	1	.280				
1279-	CONROD	32809	2809	2859	1	.280				
1280-	CONROD	32811	2811	2861	1	.280				
1281-	CONROD	32812	2812	2862	1	.280				
1282-	CONROD	32814	2814	2864	1	.435				
1283-	CONROD	32815	2815	2865	1	.465				
1284-	CONROD	32817	2817	2867	1	.310				
1285-	CONROD	32819	2819	2869	1	.310				
1286-	CONROD	32821	2821	2871	1	.280				
1287-	CONROD	32823	2823	2873	1	.420				
1288-	CONROD	32826	2826	2876	1	.413				
1289-	CONROD	32828	2828	2878	1	2.545				
1290-	CONROD	32831	2831	2881	3	1.0				
1291-	CONROD	32832	2832	2882	3	1.0				
1292-	CONROD	32901	2901	2951	1	.25				
1293-	CONROD	32902	2902	2952	1	.25				
1294-	CONROD	32903	2903	2953	1	.25				
1295-	CONROD	32904	2904	2954	1	2.075				
1296-	CONROD	32907	2907	2957	1	.228				
1297-	CONROD	32909	2909	2959	1	.228				
1298-	CONROD	32911	2911	2961	1	.228				
1299-	CONROD	32912	2912	2962	1	.228				
1300-	CONROD	32914	2914	2964	1	.365				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
1301-	CONROD	32915	2915	2965	1	.410				
1302-	CONROD	32917	2917	2967	1	.273				
1303-	CONROD	32919	2919	2969	1	.273				
1304-	CONROD	32921	2921	2971	1	.273				
1305-	CONROD	32923	2923	2973	1	.365				
1306-	CONROD	32926	2926	2976	1	.365				
1307-	CONROD	32928	2928	2978	1	2.175				
1308-	CONROD	32929	2929	2979	3	1.0				
1309-	CONROD	32930	2930	2980	3	1.0				
1310-	CONROD	32931	2931	2981	3	1.0				
1311-	CONROD	32932	2932	2982	3	1.0				
1312-	CONROD	33001	3001	3051	1	.25				
1313-	CONROD	33002	3002	3052	1	.25				
1314-	CONROD	33003	3003	3053	1	.25				
1315-	CONROD	33004	3004	3054	1	2.320				
1316-	CONROD	33007	3007	3057	1	.342				
1317-	CONROD	33011	3011	3061	1	.456				
1318-	CONROD	33014	3014	3064	1	.471				
1319-	CONROD	33015	3015	3065	1	.486				
1320-	CONROD	33019	3019	3069	1	.471				
1321-	CONROD	33023	3023	3073	1	.365				
1322-	CONROD	33026	3026	3076	1	.228				
1323-	CONROD	33028	3028	3078	1	2.355				
1324-	CONROD	33029	3029	3079	1	.5				
1325-	CONROD	33030	3030	3080	1	.5				
1326-	CONROD	33031	3031	3081	1	.5				
1327-	CONROD	33032	3032	3082	1	.5				
1328-	CONROD	33101	3101	3151	1	.25				
1329-	CONROD	33102	3102	3152	1	.25				
1330-	CONROD	33103	3103	3153	1	.25				
1331-	CONROD	33104	3104	3154	1	1.850				
1332-	CONROD	33107	3107	3157	1	.218				
1333-	CONROD	33111	3111	3161	1	.327				
1334-	CONROD	33114	3114	3164	1	.451				
1335-	CONROD	33115	3115	3165	1	.496				
1336-	CONROD	33119	3119	3169	1	.481				
1337-	CONROD	33123	3123	3173	1	.327				
1338-	CONROD	33128	3128	3178	1	2.325				
1339-	CONROD	33131	3131	3181	3	1.0				
1340-	CONROD	33132	3132	3182	3	1.0				
1341-	CONROD	33201	3201	3251	1	.25				
1342-	CONROD	33202	3202	3252	1	.25				
1343-	CONROD	33203	3203	3253	1	.25				
1344-	CONROD	33204	3204	3254	1	1.735				
1345-	CONROD	33211	3211	3261	1	.270				
1346-	CONROD	33214	3214	3264	1	.345				
1347-	CONROD	33215	3215	3265	1	.360				
1348-	CONROD	33219	3219	3269	1	.345				
1349-	CONROD	33223	3223	3273	1	.330				
1350-	CONROD	33228	3228	3278	1	2.035				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
1351-	CONROD	33229	3229	3279	3	1.0				
1352-	CONROD	33230	3230	3280	3	1.0				
1353-	CONROD	33231	3231	3281	3	1.0				
1354-	CONROD	33232	3232	3282	3	1.0				
1355-	CONROD	33301	3301	3351	1	.25				
1356-	CONROD	33302	3302	3352	1	.25				
1357-	CONROD	33303	3303	3353	1	.25				
1358-	CONROD	33304	3304	3354	1	1.540				
1359-	CONROD	33311	3311	3361	1	.270				
1360-	CONROD	33314	3314	3364	1	.345				
1361-	CONROD	33315	3315	3365	1	.360				
1362-	CONROD	33319	3319	3369	1	.345				
1363-	CONROD	33323	3323	3373	1	.330				
1364-	CONROD	33328	3328	3378	1	2.165				
1365-	CONROD	33329	3329	3379	1	.5				
1366-	CONROD	33330	3330	3380	1	.5				
1367-	CONROD	33331	3331	3381	1	.5				
1368-	CONROD	33332	3332	3382	1	.5				
1369-	CONROD	33401	3401	3451	1	.50				
1370-	CONROD	33402	3402	3452	1	.50				
1371-	CONROD	33403	3403	3453	1	.50				
1372-	CONROD	33404	3404	3454	1	1.630				
1373-	CONROD	33411	3411	3461	1	.270				
1374-	CONROD	33414	3414	3464	1	.345				
1375-	CONROD	33415	3415	3465	1	.360				
1376-	CONROD	33419	3419	3469	1	.345				
1377-	CONROD	33423	3423	3473	1	.330				
1378-	CONROD	33428	3428	3478	1	2.135				
1379-	CONROD	33431	3431	3481	3	1.0				
1380-	CONROD	33432	3432	3482	3	1.0				
1381-	CONROD	33501	3501	3551	1	.25				
1382-	CONROD	33502	3502	3552	1	.25				
1383-	CONROD	33503	3503	3553	1	.25				
1384-	CONROD	33504	3504	3554	1	1.630				
1385-	CONROD	33511	3511	3561	1	.270				
1386-	CONROD	33514	3514	3564	1	.345				
1387-	CONROD	33515	3515	3565	1	.360				
1388-	CONROD	33519	3519	3569	1	.345				
1389-	CONROD	33523	3523	3573	1	.330				
1390-	CONROD	33528	3528	3578	1	1.715				
1391-	CONROD	33529	3529	3579	3	1.0				
1392-	CONROD	33530	3530	3580	3	1.0				
1393-	CONROD	33531	3531	3581	3	1.0				
1394-	CONROD	33532	3532	3582	3	1.0				
1395-	CONROD	33601	3601	3651	1	.25				
1396-	CONROD	33602	3602	3652	1	.25				
1397-	CONROD	33603	3603	3653	1	.25				
1398-	CONROD	33604	3604	3654	1	.815				
1399-	CONROD	33611	3611	3661	1	.2				
1400-	CONROD	33614	3614	3664	1	.2				

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6 .. 7 .. 8 .. 9 .. 10 .
1401-	CONROD	33615	3615	3665	1	.210
1402-	CONROD	33619	3619	3669	1	.2
1403-	CONROD	33623	3623	3673	1	.2
1404-	CONROD	33628	3628	3678	1	.800
1405-	CONROD	33629	3629	3679	1	.5
1406-	CONROD	33630	3630	3680	1	.5
1407-	CONROD	33631	3631	3681	1	.5
1408-	CONROD	33632	3632	3682	1	.5
1409-	CONROD	33701	3701	3751	1	.25
1410-	CONROD	33702	3702	3752	1	.25
1411-	CONROD	33703	3703	3753	1	.25
1412-	CONROD	33704	3704	3754	1	1.100
1413-	CONROD	33711	3711	3761	1	.150
1414-	CONROD	33714	3714	3764	1	.300
1415-	CONROD	33715	3715	3765	1	.300
1416-	CONROD	33719	3719	3769	1	.300
1417-	CONROD	33723	3723	3773	1	.225
1418-	CONROD	33728	3728	3778	1	.720
1419-	CONROD	33731	3731	3781	3	1.0
1420-	CONROD	33732	3732	3782	3	1.0
1421-	CONROD	33801	3801	3851	1	.25
1422-	CONROD	33802	3802	3852	1	.25
1423-	CONROD	33803	3803	3853	1	.25
1424-	CONROD	33804	3804	3854	1	.945
1425-	CONROD	33814	3814	3864	1	.300
1426-	CONROD	33815	3815	3865	1	.300
1427-	CONROD	33819	3819	3869	1	.300
1428-	CONROD	33823	3823	3873	1	.225
1429-	CONROD	33828	3828	3878	1	.630
1430-	CONROD	33829	3829	3879	3	1.0
1431-	CONROD	33830	3830	3880	3	1.0
1432-	CONROD	33831	3831	3881	3	1.0
1433-	CONROD	33832	3832	3882	3	1.0
1434-	CONROD	33901	3901	3951	1	.25
1435-	CONROD	33902	3902	3952	1	.25
1436-	CONROD	33903	3903	3953	1	.25
1437-	CONROD	33904	3904	3954	1	1.185
1438-	CONROD	33914	3914	3964	1	.345
1439-	CONROD	33915	3915	3965	1	.345
1440-	CONROD	33919	3919	3969	1	.345
1441-	CONROD	33923	3923	3973	1	.345
1442-	CONROD	33928	3928	3978	1	.750
1443-	CONROD	33929	3929	3979	1	.5
1444-	CONROD	33930	3930	3980	1	.5
1445-	CONROD	33931	3931	3981	1	.5
1446-	CONROD	33932	3932	3982	1	.5
1447-	CONROD	34001	4001	4051	1	.25
1448-	CONROD	34002	4002	4052	1	.25
1449-	CONROD	34003	4003	4053	1	.25
1450-	CONROD	34004	4004	4054	1	.968

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
1451-	CONROD	34014	4014	4064	1	.225				
1452-	CONROD	34015	4015	4065	1	.285				
1453-	CONROD	34019	4019	4069	1	.285				
1454-	CONROD	34023	4023	4073	1	.285				
1455-	CONROD	34028	4028	4078	1	.690				
1456-	CONROD	34031	4031	4081	3	2.0				
1457-	CONROD	34032	4032	4082	3	2.0				
1458-	CONROD	34101	4101	4151	1	.50				
1459-	CONROD	34102	4102	4152	1	.50				
1460-	CONROD	34103	4103	4153	1	.50				
1461-	CONROD	34104	4104	4154	1	1.035				
1462-	CONROD	34114	4114	4164	1	.225				
1463-	CONROD	34115	4115	4165	1	.285				
1464-	CONROD	34119	4119	4169	1	.285				
1465-	CONROD	34123	4123	4173	1	.225				
1466-	CONROD	34128	4128	4178	1	.690				
1467-	CONROD	34129	4129	4179	3	1.0				
1468-	CONROD	34130	4130	4180	3	1.0				
1469-	CONROD	34132	4132	4182	1	.5				
1470-	CONROD	34201	4201	4251	1	.25				
1471-	CONROD	34202	4202	4252	1	.25				
1472-	CONROD	34203	4203	4253	1	.25				
1473-	CONROD	34204	4204	4254	1	.810				
1474-	CONROD	34214	4214	4264	1	.225				
1475-	CONROD	34215	4215	4265	1	.285				
1476-	CONROD	34219	4219	4269	1	.285				
1477-	CONROD	34223	4223	4273	1	.225				
1478-	CONROD	34228	4228	4278	1	.600				
1479-	CONROD	34229	4229	4279	1	.5				
1480-	CONROD	34230	4230	4280	1	.5				
1481-	CONROD	34232	4232	4282	1	.5				
1482-	CONROD	34301	4301	4351	1	.25				
1483-	CONROD	34302	4302	4352	1	.25				
1484-	CONROD	34303	4303	4353	1	.25				
1485-	CONROD	34304	4304	4354	1	.773				
1486-	CONROD	34314	4314	4364	1	.225				
1487-	CONROD	34315	4315	4365	1	.285				
1488-	CONROD	34319	4319	4369	1	.285				
1489-	CONROD	34323	4323	4373	1	.225				
1490-	CONROD	34328	4328	4378	1	.600				
1491-	CONROD	34329	4329	4379	1	.5				
1492-	CONROD	34330	4330	4380	1	.5				
1493-	CONROD	34332	4332	4382	1	.5				
1494-	CONROD	34401	4401	4451	1	.25				
1495-	CONROD	34402	4402	4452	1	.25				
1496-	CONROD	34403	4403	4453	1	.25				
1497-	CONROD	34404	4404	4454	1	.698				
1498-	CONROD	34415	4415	4465	1	.285				
1499-	CONROD	34419	4419	4469	1	.285				
1500-	CONROD	34423	4423	4473	1	.225				

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
1501-	CONROD	34428	4428	4478	1	.555				
1502-	CONROD	34429	4429	4479	1	.5				
1503-	CONROD	34430	4430	4480	1	.5				
1504-	CONROD	34432	4432	4482	1	.5				
1505-	CONROD	34501	4501	4551	1	.25				
1506-	CONROD	34502	4502	4552	1	.25				
1507-	CONROD	34503	4503	4553	1	.25				
1508-	CONROD	34504	4504	4554	1	.675				
1509-	CONROD	34515	4515	4565	1	.250				
1510-	CONROD	34519	4519	4569	1	.270				
1511-	CONROD	34523	4523	4573	1	.270				
1512-	CONROD	34528	4528	4578	1	.540				
1513-	CONROD	34529	4529	4579	1	.5				
1514-	CONROD	34530	4530	4580	1	.5				
1515-	CONROD	34532	4532	4582	1	.5				
1516-	CONROD	34601	4601	4651	1	.25				
1517-	CONROD	34602	4602	4652	1	.25				
1518-	CONROD	34603	4603	4653	1	.25				
1519-	CONROD	34604	4604	4654	1	1.275				
1520-	CONROD	34611	4611	4661	1	.25				
1521-	CONROD	34612	4612	4662	1	.25				
1522-	CONROD	34615	4615	4665	1	.250				
1523-	CONROD	34619	4619	4669	1	.270				
1524-	CONROD	34623	4623	4673	1	.250				
1525-	CONROD	34628	4628	4678	1	.540				
1526-	CONROD	34629	4629	4679	1	.5				
1527-	CONROD	34630	4630	4680	1	.5				
1528-	CONROD	34632	4632	4682	1	.5				
1529-	CONROD	34701	4701	4751	1	.50				
1530-	CONROD	34702	4702	4752	1	.50				
1531-	CONROD	34704	4704	4754	1	.675				
1532-	CONROD	34715	4715	4765	1	.2				
1533-	CONROD	34719	4719	4769	1	.2				
1534-	CONROD	34723	4723	4773	1	.2				
1535-	CONROD	34728	4728	4778	1	.405				
1536-	CONROD	34729	4729	4779	1	.5				
1537-	CONROD	34730	4730	4780	1	.5				
1538-	CONROD	34732	4732	4782	1	.5				
1539-	CQDMEM2	202001	1060	2001	2201	2202	2002			
1540-	CQDMEM2	202002	1060	2002	2202	2203	2003			
1541-	CQDMEM2	202004	1809	2004	2104	2107	2007			
1542-	CQDMEM2	202007	1809	2007	2107	2111	2011			
1543-	CQDMEM2	202011	1809	2011	2111	2114	2014			
1544-	CQDMEM2	202014	1886	2014	2114	2115	2015			
1545-	CQDMEM2	202015	1775	2015	2115	2119	2019			
1546-	CQDMEM2	202019	1809	2019	2119	2123	2023			
1547-	CQDMEM2	202023	1809	2023	2123	2126	2026			
1548-	CQDMEM2	202026	1809	2026	2126	2128	2028			
1549-	CQDMEM2	202028	1050	2028	2128	2129	2029			
1550-	CQDMEM2	202029	1050	2029	2129	2130	2030			

SORTED BULK DATA ECHO

CARD COUNT	. 1 .. 2 .. 3 .. 4 .. 5 .. 6 .. 7 .. 8 .. 9 .. 10 .
1551-	CQDMEM2 202030 1050 2030 2130 2132 2032
1552-	CQDMEM2 202051 1050 2051 2251 2252 2052
1553-	CQDMEM2 202052 1050 2052 2252 2253 2053
1554-	CQDMEM2 202054 11318 2054 2154 2157 2057
1555-	CQDMEM2 202057 11318 2057 2157 2161 2061
1556-	CQDMEM2 202061 11417 2061 2161 2164 2064
1557-	CQDMEM2 202064 11808 2064 2164 2165 2065
1558-	CQDMEM2 202065 1750 2065 2165 2169 2069
1559-	CQDMEM2 202069 11417 2069 2169 2173 2073
1560-	CQDMEM2 202073 11010 2073 2173 2176 2076
1561-	CQDMEM2 202076 11318 2076 2176 2178 2078
1562-	CQDMEM2 202078 1050 2078 2178 2179 2079
1563-	CQDMEM2 202079 1050 2079 2179 2180 2080
1564-	CQDMEM2 202080 1050 2080 2180 2182 2082
1565-	CQDMEM2 202104 1537 2104 2204 2207 2107
1566-	CQDMEM2 202107 1537 2107 2207 2211 2111
1567-	CQDMEM2 202111 1537 2111 2211 2214 2114
1568-	CQDMEM2 202114 1537 2114 2214 2215 2115
1569-	CQDMEM2 202115 1537 2115 2215 2219 2119
1570-	CQDMEM2 202119 1537 2119 2219 2223 2123
1571-	CQDMEM2 202123 1537 2123 2223 2226 2126
1572-	CQDMEM2 202126 1537 2126 2226 2228 2128
1573-	CQDMEM2 202128 1050 2128 2228 2229 2129
1574-	CQDMEM2 202129 1050 2129 2229 2230 2130
1575-	CQDMEM2 202130 1050 2130 2230 2232 2132
1576-	CQDMEM2 202132 1050 2132 2232 2233 2133
1577-	CQDMEM2 202154 1598 2154 2254 2257 2157
1578-	CQDMEM2 202157 1598 2157 2257 2261 2161
1579-	CQDMEM2 202161 1762 2161 2261 2264 2164
1580-	CQDMEM2 202164 11310 2164 2264 2265 2165
1581-	CQDMEM2 202165 1640 2165 2265 2269 2169
1582-	CQDMEM2 202169 11496 2169 2269 2273 2173
1583-	CQDMEM2 202173 11025 2173 2273 2276 2176
1584-	CQDMEM2 202176 11388 2176 2276 2278 2178
1585-	CQDMEM2 202178 1050 2178 2278 2279 2179
1586-	CQDMEM2 202179 1050 2179 2279 2280 2180
1587-	CQDMEM2 202180 1050 2180 2280 2282 2182
1588-	CQDMEM2 202182 1050 2182 2282 2233 2183
1589-	CQDMEM2 202201 1060 2201 2401 2402 2202
1590-	CQDMEM2 202202 1060 2202 2402 2403 2203
1591-	CQDMEM2 202204 1503 2204 2304 2307 2207
1592-	CQDMEM2 202207 1503 2207 2307 2311 2211
1593-	CQDMEM2 202211 1503 2211 2311 2314 2214
1594-	CQDMEM2 202214 1503 2214 2314 2315 2215
1595-	CQDMEM2 202215 1503 2215 2315 2319 2219
1596-	CQDMEM2 202219 1503 2219 2319 2323 2223
1597-	CQDMEM2 202223 1503 2223 2323 2326 2226
1598-	CQDMEM2 202226 1503 2226 2326 2328 2228
1599-	CQDMEM2 202228 4055 2228 2328 2429 2229
1600-	CQDMEM2 202229 4055 2229 2429 2430 2230

SORTED BULK DATA ECHO

CARD COUNT	. 1 .. 2 .. 3 .. 4 .. 5 .. 6 .. 7 .. 8 .. 9 .. 10 .
1601-	CQDMEM2 202251 1050 2251 2451 2452 2252
1602-	CQDMEM2 202252 1050 2252 2452 2453 2253
1603-	CQDMEM2 202254 1564 2254 2354 2357 2257
1604-	CQDMEM2 202257 1564 2257 2357 2361 2261
1605-	CQDMEM2 202261 1667 2261 2361 2364 2264
1606-	CQDMEM2 202264 11050 2264 2364 2365 2265
1607-	CQDMEM2 202265 1740 2265 2365 2369 2269
1608-	CQDMEM2 202269 11050 2269 2369 2373 2273
1609-	CQDMEM2 202273 1350 2273 2373 2376 2276
1610-	CQDMEM2 202276 11025 2276 2376 2378 2278
1611-	CQDMEM2 202278 1125 2278 2378 2479 2279
1612-	CQDMEM2 202279 4055 2279 2479 2480 2280
1613-	CQDMEM2 202304 1470 2304 2404 2407 2307
1614-	CQDMEM2 202307 1470 2307 2407 2411 2311
1615-	CQDMEM2 202311 1470 2311 2411 2414 2314
1616-	CQDMEM2 202314 1470 2314 2414 2415 2315
1617-	CQDMEM2 202315 1470 2315 2415 2419 2319
1618-	CQDMEM2 202319 1470 2319 2419 2423 2323
1619-	CQDMEM2 202323 1470 2323 2423 2426 2326
1620-	CQDMEM2 202326 1470 2326 2426 2428 2328
1621-	CQDMEM2 202331 1055 2331 2431 2432 2332
1622-	CQDMEM2 202332 1055 2332 2432 2433 2333
1623-	CQDMEM2 202354 1530 2354 2454 2457 2357
1624-	CQDMEM2 202357 1530 2357 2457 2461 2361
1625-	CQDMEM2 202361 1615 2361 2461 2464 2364
1626-	CQDMEM2 202364 11114 2364 2464 2465 2365
1627-	CQDMEM2 202365 1600 2365 2465 2469 2369
1628-	CQDMEM2 202369 11410 2369 2469 2473 2373
1629-	CQDMEM2 202373 1564 2373 2473 2476 2376
1630-	CQDMEM2 202376 1820 2376 2476 2478 2378
1631-	CQDMEM2 202381 1055 2381 2481 2482 2382
1632-	CQDMEM2 202382 1055 2382 2482 2433 2333
1633-	CQDMEM2 202404 1436 2404 2504 2507 2407
1634-	CQDMEM2 202414 1436 2414 2514 2515 2415
1635-	CQDMEM2 202423 1436 2423 2523 2526 2426
1636-	CQDMEM2 202426 1436 2426 2526 2528 2428
1637-	CQDMEM2 202428 4055 2428 2528 2529 2429
1638-	CQDMEM2 202429 4055 2429 2529 2530 2430
1639-	CQDMEM2 202431 1055 2431 2531 2532 2432
1640-	CQDMEM2 202432 1055 2432 2532 2533 2433
1641-	CQDMEM2 202454 1480 2454 2554 2557 2457
1642-	CQDMEM2 202464 11020 2464 2564 2565 2465
1643-	CQDMEM2 202473 1450 2473 2573 2576 2476
1644-	CQDMEM2 202476 1730 2476 2576 2578 2478
1645-	CQDMEM2 202478 1125 2478 2578 2579 2479
1646-	CQDMEM2 202479 4055 2479 2579 2580 2480
1647-	CQDMEM2 202481 1055 2481 2581 2582 2482
1648-	CQDMEM2 202482 1055 2482 2582 2533 2433
1649-	CQDMEM2 202501 1060 2501 2601 2602 2502
1650-	CQDMEM2 202502 1060 2502 2602 2603 2503

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
1651-	CQDMEM2	202504	1402	2504	2604	2607	2507			
1652-	CQDMEM2	202507	1402	2507	2607	2609	2509			
1653-	CQDMEM2	202509	1402	2509	2609	2611	2511			
1654-	CQDMEM2	202511	1402	2511	2611	2612	2512			
1655-	CQDMEM2	202512	1402	2512	2612	2614	2514			
1656-	CQDMEM2	202514	1402	2514	2614	2615	2515			
1657-	CQDMEM2	202515	1402	2515	2615	2617	2517			
1658-	CQDMEM2	202517	1402	2517	2617	2619	2519			
1659-	CQDMEM2	202519	1402	2519	2619	2621	2521			
1660-	CQDMEM2	202521	1402	2521	2621	2623	2523			
1661-	CQDMEM2	202523	1402	2523	2623	2626	2526			
1662-	CQDMEM2	202526	1402	2526	2626	2628	2528			
1663-	CQDMEM2	202528	4055	2528	2628	2729	2529			
1664-	CQDMEM2	202529	4055	2529	2729	2730	2530			
1665-	CQDMEM2	202551	1050	2551	2651	2652	2552			
1666-	CQDMEM2	202552	1050	2552	2652	2653	2553			
1667-	CQDMEM2	202554	1431	2554	2654	2657	2557			
1668-	CQDMEM2	202557	1431	2557	2657	2659	2559			
1669-	CQDMEM2	202559	1431	2559	2659	2661	2561			
1670-	CQDMEM2	202561	1431	2561	2661	2662	2562			
1671-	CQDMEM2	202562	1511	2562	2662	2664	2564			
1672-	CQDMEM2	202564	1350	2564	2664	2665	2565			
1673-	CQDMEM2	202565	1730	2565	2665	2667	2567			
1674-	CQDMEM2	202567	1350	2567	2667	2669	2569			
1675-	CQDMEM2	202569	1561	2569	2669	2671	2571			
1676-	CQDMEM2	202571	1561	2571	2671	2673	2573			
1677-	CQDMEM2	202573	1350	2573	2673	2676	2576			
1678-	CQDMEM2	202576	1680	2576	2676	2678	2578			
1679-	CQDMEM2	202578	1125	2578	2678	2779	2579			
1680-	CQDMEM2	202579	4055	2579	2779	2780	2580			
1681-	CQDMEM2	202601	1060	2601	2801	2802	2602			
1682-	CQDMEM2	202602	1060	2602	2802	2803	2603			
1683-	CQDMEM2	202604	1381	2604	2704	2707	2607			
1684-	CQDMEM2	202607	1381	2607	2707	2709	2609			
1685-	CQDMEM2	202609	1381	2609	2709	2711	2611			
1686-	CQDMEM2	202611	1381	2611	2711	2712	2612			
1687-	CQDMEM2	202612	1381	2612	2712	2714	2614			
1688-	CQDMEM2	202614	1381	2614	2714	2715	2615			
1689-	CQDMEM2	202615	1381	2615	2715	2717	2617			
1690-	CQDMEM2	202617	1381	2617	2717	2719	2619			
1691-	CQDMEM2	202619	1381	2619	2719	2721	2621			
1692-	CQDMEM2	202621	1381	2621	2721	2723	2623			
1693-	CQDMEM2	202623	1381	2623	2723	2726	2626			
1694-	CQDMEM2	202626	1381	2626	2726	2728	2628			
1695-	CQDMEM2	202631	1055	2631	2731	2732	2632			
1696-	CQDMEM2	202632	1055	2632	2732	2733	2633			
1697-	CQDMEM2	202651	1050	2651	2851	2852	2652			
1698-	CQDMEM2	202652	1050	2652	2852	2853	2653			
1699-	CQDMEM2	202654	1413	2654	2754	2757	2657			
1700-	CQDMEM2	202657	1409	2657	2757	2759	2659			

SORTED BULK DATA ECHO

CARD COUNT	. 1 .. 2 .. 3 .. 4 .. 5 .. 6 .. 7 .. 8 .. 9 .. 10 .
1701-	CQDMEM2 202659 1409 2659 2759 2761 2661
1702-	CQDMEM2 202661 1409 2661 2761 2762 2662
1703-	CQDMEM2 202662 1409 2662 2762 2764 2664
1704-	CQDMEM2 202664 1554 2664 2764 2765 2665
1705-	CQDMEM2 202665 1361 2665 2765 2767 2667
1706-	CQDMEM2 202667 1361 2667 2767 2769 2669
1707-	CQDMEM2 202669 1409 2669 2769 2771 2671
1708-	CQDMEM2 202671 1409 2671 2771 2773 2673
1709-	CQDMEM2 202673 1361 2673 2773 2776 2676
1710-	CQDMEM2 202676 1585 2676 2776 2778 2678
1711-	CQDMEM2 202681 1055 2681 2781 2782 2682
1712-	CQDMEM2 202682 1055 2682 2782 2733 2633
1713-	CQDMEM2 202704 1372 2704 2804 2807 2707
1714-	CQDMEM2 202707 1372 2707 2807 2809 2709
1715-	CQDMEM2 202709 1372 2709 2809 2811 2711
1716-	CQDMEM2 202711 1372 2711 2811 2812 2712
1717-	CQDMEM2 202712 1372 2712 2812 2814 2714
1718-	CQDMEM2 202714 1372 2714 2814 2815 2715
1719-	CQDMEM2 202715 1372 2715 2815 2817 2717
1720-	CQDMEM2 202717 1372 2717 2817 2819 2719
1721-	CQDMEM2 202719 1372 2719 2819 2821 2721
1722-	CQDMEM2 202721 1372 2721 2821 2823 2723
1723-	CQDMEM2 202723 1372 2723 2823 2826 2726
1724-	CQDMEM2 202726 1372 2726 2826 2828 2728
1725-	CQDMEM2 202729 4055 2729 2929 2930 2730
1726-	CQDMEM2 202731 1055 2731 2831 2832 2732
1727-	CQDMEM2 202732 1055 2732 2832 2833 2733
1728-	CQDMEM2 202754 1400 2754 2854 2857 2757
1729-	CQDMEM2 202757 1400 2757 2857 2859 2759
1730-	CQDMEM2 202759 1400 2759 2859 2861 2761
1731-	CQDMEM2 202761 1400 2761 2861 2862 2762
1732-	CQDMEM2 202762 1400 2762 2862 2864 2764
1733-	CQDMEM2 202764 1535 2764 2864 2865 2765
1734-	CQDMEM2 202765 1385 2765 2865 2867 2767
1735-	CQDMEM2 202767 1385 2767 2867 2869 2769
1736-	CQDMEM2 202769 1400 2769 2869 2871 2771
1737-	CQDMEM2 202771 1400 2771 2871 2873 2773
1738-	CQDMEM2 202773 1385 2773 2873 2876 2776
1739-	CQDMEM2 202776 1460 2776 2876 2878 2778
1740-	CQDMEM2 202779 4055 2779 2979 2980 2780
1741-	CQDMEM2 202781 1055 2781 2881 2882 2782
1742-	CQDMEM2 202782 1055 2782 2882 2833 2733
1743-	CQDMEM2 202804 1359 2804 2904 2907 2807
1744-	CQDMEM2 202807 1359 2807 2907 2909 2809
1745-	CQDMEM2 202809 1359 2809 2909 2911 2811
1746-	CQDMEM2 202811 1359 2811 2911 2912 2812
1747-	CQDMEM2 202812 1359 2812 2912 2914 2814
1748-	CQDMEM2 202814 1359 2814 2914 2915 2815
1749-	CQDMEM2 202815 1359 2815 2915 2917 2817
1750-	CQDMEM2 202817 1359 2817 2917 2919 2819

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
1751-	CQDMEM2	202819	1359	2819	2919	2921	2821			
1752-	CQDMEM2	202821	1359	2821	2921	2923	2823			
1753-	CQDMEM2	202823	1359	2823	2923	2926	2826			
1754-	CQDMEM2	202826	1359	2826	2926	2928	2828			
1755-	CQDMEM2	202828	4055	2828	2928	2929	2729			
1756-	CQDMEM2	202854	1385	2854	2954	2957	2857			
1757-	CQDMEM2	202857	1385	2857	2957	2959	2859			
1758-	CQDMEM2	202859	1385	2859	2959	2961	2861			
1759-	CQDMEM2	202861	1385	2861	2961	2962	2862			
1760-	CQDMEM2	202862	1385	2862	2962	2964	2864			
1761-	CQDMEM2	202864	1535	2864	2964	2965	2865			
1762-	CQDMEM2	202865	1385	2865	2965	2967	2867			
1763-	CQDMEM2	202867	1385	2867	2967	2969	2869			
1764-	CQDMEM2	202869	1385	2869	2969	2971	2871			
1765-	CQDMEM2	202871	1385	2871	2971	2973	2873			
1766-	CQDMEM2	202873	1385	2873	2973	2976	2876			
1767-	CQDMEM2	202876	1385	2876	2976	2978	2878			
1768-	CQDMEM2	202878	1125	2878	2978	2979	2779			
1769-	CQDMEM2	202901	1060	2901	3001	3002	2902			
1770-	CQDMEM2	202902	1060	2902	3002	3003	2903			
1771-	CQDMEM2	202904	1342	2904	3004	3007	2907			
1772-	CQDMEM2	202914	1342	2914	3014	3015	2915			
1773-	CQDMEM2	202923	1342	2923	3023	3026	2926			
1774-	CQDMEM2	202926	1342	2926	3026	3028	2928			
1775-	CQDMEM2	202928	4055	2928	3028	3029	2929			
1776-	CQDMEM2	202929	4055	2929	3029	3030	2930			
1777-	CQDMEM2	202931	1055	2931	3031	3032	2932			
1778-	CQDMEM2	202932	1055	2932	3032	3033	2933			
1779-	CQDMEM2	202951	1050	2951	3051	3052	2952			
1780-	CQDMEM2	202952	1050	2952	3052	3053	2953			
1781-	CQDMEM2	202954	1355	2954	3054	3057	2957			
1782-	CQDMEM2	202964	1585	2964	3064	3065	2965			
1783-	CQDMEM2	202973	1355	2973	3073	3076	2976			
1784-	CQDMEM2	202976	1355	2976	3076	3078	2978			
1785-	CQDMEM2	202978	1150	2978	3078	3079	2979			
1786-	CQDMEM2	202979	4055	2979	3079	3080	2980			
1787-	CQDMEM2	202981	1055	2981	3081	3082	2982			
1788-	CQDMEM2	202982	1055	2982	3082	3033	2933			
1789-	CQDMEM2	203001	1060	3001	3101	3102	3002			
1790-	CQDMEM2	203002	1060	3002	3102	3103	3003			
1791-	CQDMEM2	203004	1324	3004	3104	3107	3007			
1792-	CQDMEM2	203007	1324	3007	3107	3111	3011			
1793-	CQDMEM2	203011	1324	3011	3111	3114	3014			
1794-	CQDMEM2	203014	1324	3014	3114	3115	3015			
1795-	CQDMEM2	203015	1324	3015	3115	3119	3019			
1796-	CQDMEM2	203019	1324	3019	3119	3123	3023			
1797-	CQDMEM2	203023	1324	3023	3123	3128	3028			
1798-	CQDMEM2	203029	4055	3029	3129	3230	3030			
1799-	CQDMEM2	203031	1055	3031	3131	3132	3032			
1800-	CQDMEM2	203032	1055	3032	3132	3133	3033			

SORTED BULK DATA ECHO

CARD COUNT	. 1 .. 2 .. 3 .. 4 .. 5 .. 6 .. 7 .. 8 .. 9 .. 10 .						
1801-	CQDMEM2	203051	1050	3051	3151	3152	3052
1802-	CQDMEM2	203052	1050	3052	3152	3153	3053
1803-	CQDMEM2	203054	1305	3054	3154	3157	3057
1804-	CQDMEM2	203057	1305	3057	3157	3161	3061
1805-	CQDMEM2	203061	1325	3061	3161	3164	3064
1806-	CQDMEM2	203064	1720	3064	3164	3165	3065
1807-	CQDMEM2	203065	1345	3065	3165	3169	3069
1808-	CQDMEM2	203069	1565	3069	3169	3173	3073
1809-	CQDMEM2	203073	1345	3073	3173	3178	3078
1810-	CQDMEM2	203079	4055	3079	3279	3280	3080
1811-	CQDMEM2	203081	1055	3081	3181	3182	3082
1812-	CQDMEM2	203082	1055	3082	3182	3133	3033
1813-	CQDMEM2	203101	1060	3101	3201	3202	3102
1814-	CQDMEM2	203102	1060	3102	3202	3203	3103
1815-	CQDMEM2	203104	1309	3104	3204	3211	3111
1816-	CQDMEM2	203111	1309	3111	3211	3214	3114
1817-	CQDMEM2	203114	1309	3114	3214	3215	3115
1818-	CQDMEM2	203115	1309	3115	3215	3219	3119
1819-	CQDMEM2	203119	1309	3119	3219	3223	3123
1820-	CQDMEM2	203123	1309	3123	3223	3228	3128
1821-	CQDMEM2	203128	4055	3128	3228	3229	3029
1822-	CQDMEM2	203151	1050	3151	3251	3252	3152
1823-	CQDMEM2	203152	1050	3152	3252	3253	3153
1824-	CQDMEM2	203154	1275	3154	3254	3261	3161
1825-	CQDMEM2	203161	1314	3161	3261	3264	3164
1826-	CQDMEM2	203164	1795	3164	3264	3265	3165
1827-	CQDMEM2	203165	1367	3165	3265	3269	3169
1828-	CQDMEM2	203169	1858	3169	3269	3273	3173
1829-	CQDMEM2	203173	1732	3173	3273	3278	3178
1830-	CQDMEM2	203178	1150	3178	3278	3279	3079
1831-	CQDMEM2	203204	1297	3204	3304	3311	3211
1832-	CQDMEM2	203211	1297	3211	3311	3314	3214
1833-	CQDMEM2	203214	1297	3214	3314	3315	3215
1834-	CQDMEM2	203215	1297	3215	3315	3319	3219
1835-	CQDMEM2	203219	1297	3219	3319	3323	3223
1836-	CQDMEM2	203223	1297	3223	3323	3328	3228
1837-	CQDMEM2	203228	4055	3228	3328	3329	3229
1838-	CQDMEM2	203229	4055	3229	3329	3330	3230
1839-	CQDMEM2	203231	1055	3231	3331	3332	3232
1840-	CQDMEM2	203232	1055	3232	3332	3333	3233
1841-	CQDMEM2	203254	1275	3254	3354	3361	3261
1842-	CQDMEM2	203261	1298	3261	3361	3364	3264
1843-	CQDMEM2	203264	1690	3264	3364	3365	3265
1844-	CQDMEM2	203265	1367	3265	3365	3369	3269
1845-	CQDMEM2	203269	1740	3269	3369	3373	3273
1846-	CQDMEM2	203273	1210	3273	3373	3378	3278
1847-	CQDMEM2	203278	1150	3278	3378	3379	3279
1848-	CQDMEM2	203279	4055	3279	3379	3380	3280
1849-	CQDMEM2	203281	1055	3281	3381	3382	3282
1850-	CQDMEM2	203282	1055	3282	3382	3333	3233

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
1851-	CQDMEM2	203301	1060	3301	3401	3402	3302			
1852-	CQDMEM2	203302	1060	3302	3402	3403	3303			
1853-	CQDMEM2	203304	1285	3304	3404	3411	3311			
1854-	CQDMEM2	203311	1285	3311	3411	3414	3314			
1855-	CQDMEM2	203314	1285	3314	3414	3415	3315			
1856-	CQDMEM2	203315	1285	3315	3415	3419	3319			
1857-	CQDMEM2	203319	1285	3319	3419	3423	3323			
1858-	CQDMEM2	203323	1285	3323	3423	3428	3328			
1859-	CQDMEM2	203329	4055	3329	3529	3530	3330			
1860-	CQDMEM2	203331	1055	3331	3431	3432	3332			
1861-	CQDMEM2	203332	1055	3332	3432	3433	3333			
1862-	CQDMEM2	203351	1050	3351	3451	3452	3352			
1863-	CQDMEM2	203352	1050	3352	3452	3453	3353			
1864-	CQDMEM2	203354	1275	3354	3454	3461	3361			
1865-	CQDMEM2	203361	1279	3361	3461	3464	3364			
1866-	CQDMEM2	203364	1550	3364	3464	3465	3365			
1867-	CQDMEM2	203365	1187	3365	3465	3469	3369			
1868-	CQDMEM2	203369	1425	3369	3469	3473	3373			
1869-	CQDMEM2	203373	1267	3373	3473	3478	3378			
1870-	CQDMEM2	203379	4055	3379	3579	3580	3380			
1871-	CQDMEM2	203381	1055	3381	3481	3482	3382			
1872-	CQDMEM2	203382	1055	3382	3482	3433	3333			
1873-	CQDMEM2	203401	1060	3401	3501	3502	3402			
1874-	CQDMEM2	203402	1060	3402	3502	3503	3403			
1875-	CQDMEM2	203404	1273	3404	3504	3511	3411			
1876-	CQDMEM2	203411	1273	3411	3511	3514	3414			
1877-	CQDMEM2	203414	1273	3414	3514	3515	3415			
1878-	CQDMEM2	203415	1273	3415	3515	3519	3419			
1879-	CQDMEM2	203419	1273	3419	3519	3523	3423			
1880-	CQDMEM2	203423	1273	3423	3523	3528	3428			
1881-	CQDMEM2	203428	4055	3428	3528	3529	3329			
1882-	CQDMEM2	203451	1050	3451	3551	3552	3452			
1883-	CQDMEM2	203452	1050	3452	3552	3553	3453			
1884-	CQDMEM2	203454	1271	3454	3554	3561	3461			
1885-	CQDMEM2	203461	1271	3461	3561	3564	3464			
1886-	CQDMEM2	203464	1390	3464	3564	3565	3465			
1887-	CQDMEM2	203465	1232	3465	3565	3569	3469			
1888-	CQDMEM2	203469	1308	3469	3569	3573	3473			
1889-	CQDMEM2	203473	1289	3473	3573	3578	3478			
1890-	CQDMEM2	203478	1150	3478	3578	3579	3379			
1891-	CQDMEM2	203504	1266	3504	3604	3611	3511			
1892-	CQDMEM2	203511	1266	3511	3611	3614	3514			
1893-	CQDMEM2	203514	1266	3514	3614	3615	3515			
1894-	CQDMEM2	203515	1266	3515	3615	3619	3519			
1895-	CQDMEM2	203519	1266	3519	3619	3623	3523			
1896-	CQDMEM2	203523	1266	3523	3623	3628	3528			
1897-	CQDMEM2	203528	4055	3528	3628	3629	3529			
1898-	CQDMEM2	203529	4055	3529	3629	3630	3530			
1899-	CQDMEM2	203531	1055	3531	3631	3632	3532			
1900-	CQDMEM2	203532	1055	3532	3632	3633	3533			

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
1901-	CQDMEM2	203554	1252	3554	3654	3661	3561			
1902-	CQDMEM2	203561	1252	3561	3661	3664	3564			
1903-	CQDMEM2	203564	1335	3564	3664	3665	3565			
1904-	CQDMEM2	203565	1252	3565	3665	3669	3569			
1905-	CQDMEM2	203569	1252	3569	3669	3673	3573			
1906-	CQDMEM2	203573	1252	3573	3673	3678	3578			
1907-	CQDMEM2	203578	1150	3578	3678	3679	3579			
1908-	CQDMEM2	203579	4055	3579	3679	3680	3580			
1909-	CQDMEM2	203581	1055	3581	3681	3682	3582			
1910-	CQDMEM2	203582	1055	3582	3682	3633	3533			
1911-	CQDMEM2	203601	1060	3601	3701	3702	3602			
1912-	CQDMEM2	203602	1060	3602	3702	3703	3603			
1913-	CQDMEM2	203604	1264	3604	3704	3711	3611			
1914-	CQDMEM2	203611	1264	3611	3711	3714	3614			
1915-	CQDMEM2	203614	1264	3614	3714	3715	3615			
1916-	CQDMEM2	203615	1264	3615	3715	3719	3619			
1917-	CQDMEM2	203619	1264	3619	3719	3723	3623			
1918-	CQDMEM2	203623	1264	3623	3723	3728	3628			
1919-	CQDMEM2	203629	4055	3629	3829	3830	3630			
1920-	CQDMEM2	203631	1055	3631	3731	3732	3632			
1921-	CQDMEM2	203632	1055	3632	3732	3733	3633			
1922-	CQDMEM2	203651	1050	3651	3751	3752	3652			
1923-	CQDMEM2	203652	1050	3652	3752	3753	3653			
1924-	CQDMEM2	203654	1232	3654	3754	3761	3661			
1925-	CQDMEM2	203661	1232	3661	3761	3764	3664			
1926-	CQDMEM2	203664	1341	3664	3764	3765	3665			
1927-	CQDMEM2	203665	1232	3665	3765	3769	3669			
1928-	CQDMEM2	203669	1232	3669	3769	3773	3673			
1929-	CQDMEM2	203673	1232	3673	3773	3778	3678			
1930-	CQDMEM2	203679	4055	3679	3879	3880	3680			
1931-	CQDMEM2	203681	1055	3681	3781	3782	3682			
1932-	CQDMEM2	203682	1055	3682	3782	3733	3633			
1933-	CQDMEM2	203701	1060	3701	3801	3802	3702			
1934-	CQDMEM2	203702	1060	3702	3802	3803	3703			
1935-	CQDMEM2	203704	1254	3704	3804	3814	3714			
1936-	CQDMEM2	203714	1254	3714	3814	3815	3715			
1937-	CQDMEM2	203715	1254	3715	3815	3819	3719			
1938-	CQDMEM2	203719	1254	3719	3819	3823	3723			
1939-	CQDMEM2	203723	1254	3723	3823	3828	3728			
1940-	CQDMEM2	203728	4055	3728	3828	3829	3629			
1941-	CQDMEM2	203751	1050	3751	3851	3852	3752			
1942-	CQDMEM2	203752	1050	3752	3852	3853	3753			
1943-	CQDMEM2	203754	1204	3754	3854	3864	3764			
1944-	CQDMEM2	203764	1366	3764	3864	3865	3765			
1945-	CQDMEM2	203765	1204	3765	3865	3869	3769			
1946-	CQDMEM2	203769	1264	3769	3869	3873	3773			
1947-	CQDMEM2	203773	1264	3773	3873	3878	3778			
1948-	CQDMEM2	203778	1150	3778	3878	3879	3679			
1949-	CQDMEM2	203801	1060	3801	3901	3902	3802			
1950-	CQDMEM2	203802	1060	3802	3902	3903	3803			

SORTED BULK DATA ECHO

CARD COUNT	. 1 .. 2 .. 3 .. 4 .. 5 .. 6 .. 7 .. 8 .. 9 .. 10 .
1951-	CQDMEM2 203804 1239 3804 3904 3914 3814
1952-	CQDMEM2 203814 1239 3814 3914 3915 3815
1953-	CQDMEM2 203815 1239 3815 3915 3919 3819
1954-	CQDMEM2 203819 1239 3819 3919 3923 3823
1955-	CQDMEM2 203823 1239 3823 3923 3928 3828
1956-	CQDMEM2 203828 4055 3828 3928 3929 3829
1957-	CQDMEM2 203829 4055 3829 3929 3930 3830
1958-	CQDMEM2 203831 1055 3831 3931 3932 3832
1959-	CQDMEM2 203832 1055 3832 3932 3933 3833
1960-	CQDMEM2 203851 1050 3851 3951 3952 3852
1961-	CQDMEM2 203852 1050 3852 3952 3953 3853
1962-	CQDMEM2 203854 1176 3854 3954 3964 3864
1963-	CQDMEM2 203864 1518 3864 3964 3965 3865
1964-	CQDMEM2 203865 1308 3865 3965 3969 3869
1965-	CQDMEM2 203869 1460 3869 3969 3973 3873
1966-	CQDMEM2 203873 1413 3873 3973 3978 3878
1967-	CQDMEM2 203878 1150 3878 3978 3979 3879
1968-	CQDMEM2 203879 4055 3879 3979 3980 3880
1969-	CQDMEM2 203881 1055 3881 3981 3982 3882
1970-	CQDMEM2 203882 1055 3882 3982 3933 3833
1971-	CQDMEM2 203904 1224 3904 4004 4014 3914
1972-	CQDMEM2 203914 1224 3914 4014 4015 3915
1973-	CQDMEM2 203915 1224 3915 4015 4019 3919
1974-	CQDMEM2 203919 1224 3919 4019 4023 3923
1975-	CQDMEM2 203923 1224 3923 4023 4028 3928
1976-	CQDMEM2 203929 4055 3929 4129 4130 3930
1977-	CQDMEM2 203931 1055 3931 4031 4032 3932
1978-	CQDMEM2 203932 1055 3932 4032 4033 3933
1979-	CQDMEM2 203954 1165 3954 4054 4064 3964
1980-	CQDMEM2 203964 1460 3964 4064 4065 3965
1981-	CQDMEM2 203965 1308 3965 4065 4069 3969
1982-	CQDMEM2 203969 1345 3969 4069 4073 3973
1983-	CQDMEM2 203973 1275 3973 4073 4078 3978
1984-	CQDMEM2 203979 4055 3979 4179 4180 3980
1985-	CQDMEM2 203981 1055 3981 4081 4082 3982
1986-	CQDMEM2 203982 1055 3982 4182 4033 3933
1987-	CQDMEM2 204001 1060 4001 4101 4102 4002
1988-	CQDMEM2 204002 1060 4002 4102 4103 4003
1989-	CQDMEM2 204004 1208 4004 4104 4114 4014
1990-	CQDMEM2 204014 1208 4014 4114 4115 4015
1991-	CQDMEM2 204015 1208 4015 4115 4119 4019
1992-	CQDMEM2 204019 1208 4019 4119 4123 4023
1993-	CQDMEM2 204023 1208 4023 4123 4128 4028
1994-	CQDMEM2 204028 4055 4028 4128 4129 3929
1995-	CQDMEM2 204051 1050 4051 4151 4152 4052
1996-	CQDMEM2 204052 1050 4052 4152 4153 4053
1997-	CQDMEM2 204054 1155 4054 4154 4164 4064
1998-	CQDMEM2 204064 1325 4064 4164 4165 4065
1999-	CQDMEM2 204065 1150 4065 4165 4169 4069
2000-	CQDMEM2 204069 1229 4069 4169 4173 4073

SORTED BULK DATA ECHO

CARD COUNT	. 1 .. 2 .. 3 .. 4 .. 5 .. 6 .. 7 .. 8 .. 9 .. 10 .
2001-	CQDMEM2 204073 1218 4073 4173 4178 4078
2002-	CQDMEM2 204078 1150 4078 4178 4179 3979
2003-	CQDMEM2 204101 1060 4101 4201 4202 4102
2004-	CQDMEM2 204102 1060 4102 4202 4203 4103
2005-	CQDMEM2 204104 1195 4104 4204 4214 4114
2006-	CQDMEM2 204114 1195 4114 4214 4215 4115
2007-	CQDMEM2 204115 1195 4115 4215 4219 4119
2008-	CQDMEM2 204119 1195 4119 4219 4223 4123
2009-	CQDMEM2 204123 1195 4123 4223 4228 4128
2010-	CQDMEM2 204128 1040 4128 4228 4229 4129
2011-	CQDMEM2 204129 1040 4129 4229 4230 4130
2012-	CQDMEM2 204130 1040 4130 4230 4232 4132
2013-	CQDMEM2 204132 1040 4132 4232 4233 4133
2014-	CQDMEM2 204151 1050 4151 4251 4252 4152
2015-	CQDMEM2 204152 1050 4152 4252 4253 4153
2016-	CQDMEM2 204154 1147 4154 4254 4264 4164
2017-	CQDMEM2 204164 1193 4164 4264 4265 4165
2018-	CQDMEM2 204165 1136 4165 4265 4269 4169
2019-	CQDMEM2 204169 1136 4169 4269 4273 4173
2020-	CQDMEM2 204173 1136 4173 4273 4278 4178
2021-	CQDMEM2 204178 1040 4178 4278 4279 4179
2022-	CQDMEM2 204179 1040 4179 4279 4280 4180
2023-	CQDMEM2 204180 1040 4180 4280 4282 4182
2024-	CQDMEM2 204182 1040 4182 4282 4233 4133
2025-	CQDMEM2 204204 1183 4204 4304 4314 4214
2026-	CQDMEM2 204214 1183 4214 4314 4315 4215
2027-	CQDMEM2 204215 1183 4215 4315 4319 4219
2028-	CQDMEM2 204219 1183 4219 4319 4323 4223
2029-	CQDMEM2 204223 1183 4223 4323 4328 4228
2030-	CQDMEM2 204228 1040 4228 4328 4329 4229
2031-	CQDMEM2 204229 1040 4229 4329 4330 4230
2032-	CQDMEM2 204230 1040 4230 4330 4332 4232
2033-	CQDMEM2 204232 1040 4232 4332 4333 4233
2034-	CQDMEM2 204254 1138 4254 4354 4364 4264
2035-	CQDMEM2 204264 1138 4264 4364 4365 4265
2036-	CQDMEM2 204265 1113 4265 4365 4369 4269
2037-	CQDMEM2 204269 1113 4269 4369 4373 4273
2038-	CQDMEM2 204273 1113 4273 4373 4378 4278
2039-	CQDMEM2 204278 1040 4278 4378 4379 4279
2040-	CQDMEM2 204279 1040 4279 4379 4380 4280
2041-	CQDMEM2 204280 1040 4280 4380 4382 4282
2042-	CQDMEM2 204282 1040 4282 4382 4333 4233
2043-	CQDMEM2 204301 1060 4301 4401 4402 4302
2044-	CQDMEM2 204302 1060 4302 4402 4403 4303
2045-	CQDMEM2 204304 1166 4304 4404 4415 4315
2046-	CQDMEM2 204315 1166 4315 4415 4419 4319
2047-	CQDMEM2 204319 1166 4319 4419 4423 4323
2048-	CQDMEM2 204323 1166 4323 4423 4428 4328
2049-	CQDMEM2 204328 1040 4328 4428 4429 4329
2050-	CQDMEM2 204329 1040 4329 4429 4430 4330

SORTED BULK DATA ECHO

CARD COUNT	. 1 .. 2 .. 3 .. 4 .. 5 .. 6 .. 7 .. 8 .. 9 .. 10 .
2051-	CQDMEM2 204330 1040 4330 4430 4432 4332
2052-	CQDMEM2 204332 1040 4332 4432 4433 4333
2053-	CQDMEM2 204351 1050 4351 4451 4452 4352
2054-	CQDMEM2 204352 1050 4352 4452 4453 4353
2055-	CQDMEM2 204354 1121 4354 4454 4465 4365
2056-	CQDMEM2 204365 1098 4365 4465 4469 4369
2057-	CQDMEM2 204369 1098 4369 4469 4473 4373
2058-	CQDMEM2 204373 1098 4373 4473 4478 4378
2059-	CQDMEM2 204378 1040 4378 4478 4479 4379
2060-	CQDMEM2 204379 1040 4379 4479 4480 4380
2061-	CQDMEM2 204380 1040 4380 4480 4482 4382
2062-	CQDMEM2 204382 1040 4382 4482 4433 4333
2063-	CQDMEM2 204401 1060 4401 4501 4502 4402
2064-	CQDMEM2 204402 1060 4402 4502 4503 4403
2065-	CQDMEM2 204404 1148 4404 4504 4515 4415
2066-	CQDMEM2 204415 1148 4415 4515 4519 4419
2067-	CQDMEM2 204419 1148 4419 4519 4523 4423
2068-	CQDMEM2 204423 1148 4423 4523 4528 4428
2069-	CQDMEM2 204428 1040 4428 4528 4529 4429
2070-	CQDMEM2 204429 1040 4429 4529 4530 4430
2071-	CQDMEM2 204430 1040 4430 4530 4532 4432
2072-	CQDMEM2 204432 1040 4432 4532 4533 4433
2073-	CQDMEM2 204451 1050 4451 4551 4552 4452
2074-	CQDMEM2 204452 1050 4452 4552 4553 4453
2075-	CQDMEM2 204454 1138 4454 4554 4565 4465
2076-	CQDMEM2 204465 1090 4465 4565 4569 4469
2077-	CQDMEM2 204469 1127 4469 4569 4573 4473
2078-	CQDMEM2 204473 1090 4473 4573 4578 4478
2079-	CQDMEM2 204478 1040 4478 4578 4579 4479
2080-	CQDMEM2 204479 1040 4479 4579 4580 4480
2081-	CQDMEM2 204480 1040 4480 4580 4582 4482
2082-	CQDMEM2 204482 1040 4482 4582 4533 4433
2083-	CQDMEM2 204501 1060 4501 4601 4602 4502
2084-	CQDMEM2 204502 1060 4502 4602 4603 4503
2085-	CQDMEM2 204504 1133 4504 4604 4615 4515
2086-	CQDMEM2 204515 1133 4515 4615 4619 4519
2087-	CQDMEM2 204519 1133 4519 4619 4623 4523
2088-	CQDMEM2 204523 1133 4523 4623 4628 4528
2089-	CQDMEM2 204528 1040 4528 4628 4629 4529
2090-	CQDMEM2 204529 1040 4529 4629 4630 4530
2091-	CQDMEM2 204530 1040 4530 4630 4632 4532
2092-	CQDMEM2 204532 1040 4532 4632 4633 4533
2093-	CQDMEM2 204551 1050 4551 4651 4652 4552
2094-	CQDMEM2 204552 1050 4552 4652 4653 4553
2095-	CQDMEM2 204554 1170 4554 4654 4665 4565
2096-	CQDMEM2 204565 1187 4565 4665 4669 4569
2097-	CQDMEM2 204569 1260 4569 4669 4673 4573
2098-	CQDMEM2 204573 1300 4573 4673 4678 4578
2099-	CQDMEM2 204578 1040 4578 4678 4679 4579
2100-	CQDMEM2 204579 1040 4579 4679 4680 4580

SORTED BULK DATA ECHO

CARD COUNT

```
.   1   ..   2   ..   3   ..   4   ..   5   ..   6   ..   7   ..   8   ..   9   ..  10   .
CQDMEM2 204580  1040    4580    4680    4682    4582
CQDMEM2 204582  1040    4582    4682    4633    4533
CQDMEM2 204601  1060    4611    4701    4702    4612
CQDMEM2 204602  1060    4612    4702    4704    4604
CQDMEM2 204604  1070    4604    4704    4715    4615
CQDMEM2 204615  1070    4615    4715    4719    4619
CQDMEM2 204619  1070    4619    4719    4723    4623
CQDMEM2 204623  1070    4623    4723    4728    4628
CQDMEM2 204628  1040    4628    4728    4729    4629
CQDMEM2 204629  1040    4629    4729    4730    4630
CQDMEM2 204630  1040    4630    4730    4732    4632
CQDMEM2 204632  1040    4632    4732    4733    4633
CQDMEM2 204651  1050    4661    4751    4752    4662
CQDMEM2 204652  1050    4662    4752    4754    4654
CQDMEM2 204654  1065    4654    4754    4765    4665
CQDMEM2 204665  1065    4665    4765    4769    4669
CQDMEM2 204669  1065    4669    4769    4773    4673
CQDMEM2 204673  1065    4673    4773    4778    4678
CQDMEM2 204678  1040    4678    4778    4779    4679
CQDMEM2 204679  1040    4679    4779    4780    4680
CQDMEM2 204680  1040    4680    4780    4782    4682
CQDMEM2 204682  1040    4682    4782    4733    4633
CQDMEM2 204704  4060    4704    4804    4815    4715
CQDMEM2 204715  4060    4715    4815    4819    4719
CQDMEM2 204719  4060    4719    4819    4823    4723
CQDMEM2 204723  4060    4723    4823    4828    4728
CQDMEM2 204728  4060    4728    4828    4829    4729
CQDMEM2 204729  4060    4729    4829    4830    4730
CQDMEM2 204730  4060    4730    4830    4832    4732
CQDMEM2 204732  4060    4732    4832    4833    4733
CQDMEM2 204754  4060    4754    4804    4815    4765
CQDMEM2 204765  4060    4765    4815    4819    4769
CQDMEM2 204769  4060    4769    4819    4823    4773
CQDMEM2 204773  4060    4773    4823    4828    4778
CQDMEM2 204778  4060    4778    4828    4829    4779
CQDMEM2 204779  4060    4779    4829    4830    4780
CQDMEM2 204780  4060    4780    4830    4832    4782
CQDMEM2 204782  4060    4782    4832    4833    4733
CQDMEM2 302001  2050    2001    2201    2251    2051
CQDMEM2 302201  2050    2201    2401    2451    2251
CQDMEM2 302501  2050    2501    2601    2651    2551
CQDMEM2 302601  2050    2601    2801    2851    2651
CQDMEM2 302901  2050    2901    3001    3051    2951
CQDMEM2 303001  2050    3001    3101    3151    3051
CQDMEM2 303101  2050    3101    3201    3251    3151
CQDMEM2 303301  2050    3301    3401    3451    3351
CQDMEM2 303401  2050    3401    3501    3551    3451
CQDMEM2 303601  2050    3601    3701    3751    3651
CQDMEM2 303701  2050    3701    3801    3851    3751
CQDMEM2 303801  2050    3801    3901    3951    3851
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SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
2151-	CQDMEM2	304801	2050	4001	4101	4151	4051			
2152-	CQDMEM2	304101	2050	4101	4201	4251	4151			
2153-	CQDMEM2	304301	2050	4301	4401	4451	4351			
2154-	CQDMEM2	304401	2050	4401	4501	4551	4451			
2155-	CQDMEM2	304501	2050	4501	4601	4651	4551			
2156-	CQDMEM2	304611	1050	4611	4701	4751	4661			
2157-	CQUAD2	201104	21203	1104	1204	1205	1105			
2158-	CQUAD2	201105	21203	1105	1205	1206	1106			
2159-	CQUAD2	201106	21203	1106	1206	1207	1107			
2160-	CQUAD2	201107	21203	1107	1207	1208	1108			
2161-	CQUAD2	201108	21203	1108	1208	1209	1109			
2162-	CQUAD2	201109	21203	1109	1209	1210	1110			
2163-	CQUAD2	201110	21203	1110	1210	1211	1111			
2164-	CQUAD2	201111	21203	1111	1211	1212	1112			
2165-	CQUAD2	201112	21203	1112	1212	1213	1113			
2166-	CQUAD2	201113	21203	1113	1213	1214	1114			
2167-	CQUAD2	201154	22131	1154	1254	1255	1155			
2168-	CQUAD2	201155	22131	1155	1255	1256	1156			
2169-	CQUAD2	201156	22131	1156	1256	1257	1157			
2170-	CQUAD2	201157	22131	1157	1257	1258	1158			
2171-	CQUAD2	201158	22131	1158	1258	1259	1159			
2172-	CQUAD2	201159	22131	1159	1259	1260	1160			
2173-	CQUAD2	201160	22131	1160	1260	1261	1161			
2174-	CQUAD2	201161	22131	1161	1261	1262	1162			
2175-	CQUAD2	201162	22131	1162	1262	1263	1163			
2176-	CQUAD2	201163	22131	1163	1263	1264	1164			
2177-	CQUAD2	201205	21804	1205	1305	1306	1206			
2178-	CQUAD2	201206	21804	1206	1306	1307	1207			
2179-	CQUAD2	201207	21804	1207	1307	1308	1208			
2180-	CQUAD2	201208	21804	1208	1308	1309	1209			
2181-	CQUAD2	201209	21804	1209	1309	1310	1210			
2182-	CQUAD2	201210	21804	1210	1310	1311	1211			
2183-	CQUAD2	201211	21804	1211	1311	1312	1212			
2184-	CQUAD2	201212	21804	1212	1312	1313	1213			
2185-	CQUAD2	201255	23196	1255	1355	1356	1256			
2186-	CQUAD2	201256	23196	1256	1356	1357	1257			
2187-	CQUAD2	201257	23196	1257	1357	1358	1258			
2188-	CQUAD2	201258	23196	1258	1358	1359	1259			
2189-	CQUAD2	201259	23196	1259	1359	1360	1260			
2190-	CQUAD2	201260	23196	1260	1360	1361	1261			
2191-	CQUAD2	201261	23196	1261	1361	1362	1262			
2192-	CQUAD2	201262	23196	1262	1362	1363	1263			
2193-	CQUAD2	201303	22406	1303	1403	1404	1304			
2194-	CQUAD2	201304	22406	1304	1404	1405	1305			
2195-	CQUAD2	201305	22406	1305	1405	1406	1306			
2196-	CQUAD2	201306	22406	1306	1406	1407	1307			
2197-	CQUAD2	201307	22406	1307	1407	1408	1308			
2198-	CQUAD2	201308	22406	1308	1408	1409	1309			
2199-	CQUAD2	201309	22406	1309	1409	1410	1310			
2200-	CQUAD2	201310	22406	1310	1410	1411	1311			

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
2201-	CQUAD2	201311	22406	1311	1411	1412	1312			
2202-	CQUAD2	201312	22406	1312	1412	1413	1313			
2203-	CQUAD2	201313	22406	1313	1413	1414	1314			
2204-	CQUAD2	201314	22406	1314	1414	1415	1315			
2205-	CQUAD2	201315	22406	1315	1415	1416	1717			
2206-	CQUAD2	201353	24262	1353	1453	1454	1354			
2207-	CQUAD2	201354	24262	1354	1454	1455	1355			
2208-	CQUAD2	201355	24262	1355	1455	1456	1356			
2209-	CQUAD2	201356	24262	1356	1456	1457	1357			
2210-	CQUAD2	201357	24262	1357	1457	1458	1358			
2211-	CQUAD2	201358	24262	1358	1458	1459	1359			
2212-	CQUAD2	201359	24262	1359	1459	1460	1360			
2213-	CQUAD2	201360	24262	1360	1460	1461	1361			
2214-	CQUAD2	201361	24262	1361	1461	1462	1362			
2215-	CQUAD2	201362	24262	1362	1462	1463	1363			
2216-	CQUAD2	201363	24262	1363	1463	1464	1364			
2217-	CQUAD2	201364	24262	1364	1464	1465	1365			
2218-	CQUAD2	201365	24262	1365	1465	1466	1767			
2219-	CQUAD2	201401	22406	1401	1402	1714	1715			
2220-	CQUAD2	201402	22406	1402	1403	1303	1714			
2221-	CQUAD2	201416	22406	1416	1401	1715	1717			
2222-	CQUAD2	201451	24262	1451	1452	1764	1765			
2223-	CQUAD2	201452	24262	1452	1453	1353	1764			
2224-	CQUAD2	201466	24262	1466	1451	1765	1767			
2225-	CQUAD2	201703	21770	1703	1803	1804	1704			
2226-	CQUAD2	201704	21770	1704	1804	1807	1707			
2227-	CQUAD2	201707	21770	1707	1807	1811	1711			
2228-	CQUAD2	201711	21770	1711	1811	1814	1714			
2229-	CQUAD2	201714	21770	1714	1814	1815	1715			
2230-	CQUAD2	201719	21770	1719	1819	1823	1723			
2231-	CQUAD2	201723	21770	1723	1823	1826	1726			
2232-	CQUAD2	201726	21770	1726	1826	1828	1728			
2233-	CQUAD2	201728	21770	1728	1828	1829	1729			
2234-	CQUAD2	201753	22770	1753	1853	1854	1754			
2235-	CQUAD2	201754	22770	1754	1854	1857	1757			
2236-	CQUAD2	201757	22770	1757	1857	1861	1761			
2237-	CQUAD2	201761	22770	1761	1861	1864	1764			
2238-	CQUAD2	201764	22770	1764	1864	1865	1765			
2239-	CQUAD2	201769	22770	1769	1869	1873	1773			
2240-	CQUAD2	201773	22770	1773	1873	1876	1776			
2241-	CQUAD2	201776	22770	1776	1876	1878	1778			
2242-	CQUAD2	201778	22770	1778	1878	1879	1779			
2243-	CQUAD2	201803	21960	1803	1903	1904	1804			
2244-	CQUAD2	201804	21478	1304	1904	1907	1807			
2245-	CQUAD2	201807	21629	1807	1907	1911	1811			
2246-	CQUAD2	201811	21559	1811	1911	1914	1814			
2247-	CQUAD2	201814	21589	1814	1914	1915	1815			
2248-	CQUAD2	201815	21514	1815	1915	1919	1819			
2249-	CQUAD2	201819	21531	1819	1919	1923	1823			
2250-	CQUAD2	201823	21488	1823	1923	1926	1826			

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
2251-	CQUAD2	201826	21454	1826	1926	1928	1828			
2252-	CQUAD2	201828	21970	1828	1928	1929	1829			
2253-	CQUAD2	201853	22711	1853	1953	1954	1854			
2254-	CQUAD2	201854	21912	1854	1954	1957	1857			
2255-	CQUAD2	201857	21930	1857	1957	1961	1861			
2256-	CQUAD2	201861	22050	1861	1961	1964	1864			
2257-	CQUAD2	201864	22359	1864	1964	1965	1865			
2258-	CQUAD2	201865	21830	1865	1965	1969	1869			
2259-	CQUAD2	201869	22023	1869	1969	1973	1873			
2260-	CQUAD2	201873	21837	1873	1973	1976	1876			
2261-	CQUAD2	201876	21748	1876	1976	1978	1878			
2262-	CQUAD2	201878	22711	1878	1978	1979	1879			
2263-	CQUAD2	201903	21910	1903	2000	2004	1904			
2264-	CQUAD2	201904	21620	1904	2004	2007	1907			
2265-	CQUAD2	201907	21720	1907	2007	2011	1911			
2266-	CQUAD2	201911	21670	1911	2011	2014	1914			
2267-	CQUAD2	201914	21690	1914	2014	2015	1915			
2268-	CQUAD2	201915	21640	1915	2015	2019	1919			
2269-	CQUAD2	201919	21730	1919	2019	2023	1923			
2270-	CQUAD2	201923	21775	1923	2023	2026	1926			
2271-	CQUAD2	201926	21600	1926	2026	2028	1928			
2272-	CQUAD2	201928	21910	1928	2028	2029	1929			
2273-	CQUAD2	201953	22262	1953	2050	2054	1954			
2274-	CQUAD2	201954	21665	1954	2054	2057	1957			
2275-	CQUAD2	201957	21555	1957	2057	2061	1961			
2276-	CQUAD2	201961	21665	1961	2061	2064	1964			
2277-	CQUAD2	201964	21905	1964	2064	2065	1965			
2278-	CQUAD2	201965	21518	1965	2065	2069	1969			
2279-	CQUAD2	201969	21650	1969	2069	2073	1973			
2280-	CQUAD2	201973	21555	1973	2073	2076	1976			
2281-	CQUAD2	201976	21535	1976	2076	2078	1978			
2282-	CQUAD2	201978	22262	1978	2078	2079	1979			
2283-	CSHEAR	101803	2250	1803	1853	1854	1804			
2284-	CSHEAR	101804	2250	1804	1854	1857	1807			
2285-	CSHEAR	101807	2250	1807	1857	1861	1811			
2286-	CSHEAR	101811	2250	1811	1861	1864	1814			
2287-	CSHEAR	101814	2250	1814	1864	1865	1815			
2288-	CSHEAR	101815	2250	1815	1865	1869	1819			
2289-	CSHEAR	101819	2250	1819	1869	1873	1823			
2290-	CSHEAR	101823	2250	1823	1873	1876	1826			
2291-	CSHEAR	101826	2250	1826	1876	1878	1828			
2292-	CSHEAR	101828	2250	1828	1878	1879	1829			
2293-	CSHEAR	102000	11250	2000	2050	2054	2004			
2294-	CSHEAR	102001	1125	2001	2051	2052	2002			
2295-	CSHEAR	102002	1125	2002	2052	2053	2003			
2296-	CSHEAR	102004	1630	2004	2054	2057	2007			
2297-	CSHEAR	102007	1380	2007	2057	2061	2011			
2298-	CSHEAR	102011	1380	2011	2061	2064	2014			
2299-	CSHEAR	102014	1380	2014	2064	2065	2015			
2300-	CSHEAR	102015	1380	2015	2065	2069	2019			

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
2301-	CSHEAR	102019	1380	2019	2069	2073	2023			
2302-	CSHEAR	102023	1380	2023	2073	2076	2026			
2303-	CSHEAR	102026	1380	2026	2076	2078	2028			
2304-	CSHEAR	102028	1050	2028	2078	2079	2029			
2305-	CSHEAR	102029	1050	2029	2079	2080	2030			
2306-	CSHEAR	102030	1050	2030	2080	2082	2032			
2307-	CSHEAR	102104	1092	2104	2154	2157	2107			
2308-	CSHEAR	102107	1120	2107	2157	2161	2111			
2309-	CSHEAR	102111	1140	2111	2161	2164	2114			
2310-	CSHEAR	102114	1140	2114	2164	2165	2115			
2311-	CSHEAR	102115	1130	2115	2165	2169	2119			
2312-	CSHEAR	102119	1110	2119	2169	2173	2123			
2313-	CSHEAR	102123	1090	2123	2173	2176	2126			
2314-	CSHEAR	102126	1080	2126	2176	2178	2128			
2315-	CSHEAR	102128	1050	2128	2178	2179	2129			
2316-	CSHEAR	102129	1050	2129	2179	2180	2130			
2317-	CSHEAR	102130	1050	2130	2180	2182	2132			
2318-	CSHEAR	102132	1050	2132	2182	2183	2133			
2319-	CSHEAR	102201	1125	2201	2251	2252	2202			
2320-	CSHEAR	102202	1125	2202	2252	2253	2203			
2321-	CSHEAR	102204	1080	2204	2254	2257	2207			
2322-	CSHEAR	102207	1080	2207	2257	2261	2211			
2323-	CSHEAR	102211	1080	2211	2261	2264	2214			
2324-	CSHEAR	102214	1080	2214	2264	2265	2215			
2325-	CSHEAR	102215	1080	2215	2265	2269	2219			
2326-	CSHEAR	102219	1080	2219	2269	2273	2223			
2327-	CSHEAR	102223	1080	2223	2273	2276	2226			
2328-	CSHEAR	102226	1080	2226	2276	2278	2228			
2329-	CSHEAR	102228	1050	2228	2278	2279	2229			
2330-	CSHEAR	102229	1050	2229	2279	2280	2230			
2331-	CSHEAR	102230	3092	2230	2280	2282	2232			
2332-	CSHEAR	102304	1080	2304	2354	2357	2307			
2333-	CSHEAR	102307	1080	2307	2357	2361	2311			
2334-	CSHEAR	102311	1080	2311	2361	2364	2314			
2335-	CSHEAR	102314	1080	2314	2364	2365	2315			
2336-	CSHEAR	102315	1080	2315	2365	2369	2319			
2337-	CSHEAR	102319	1080	2319	2369	2373	2323			
2338-	CSHEAR	102323	1080	2323	2373	2376	2326			
2339-	CSHEAR	102326	1080	2326	2376	2378	2328			
2340-	CSHEAR	102328	1050	2328	2378	2479	2429			
2341-	CSHEAR	102331	3092	2331	2381	2382	2332			
2342-	CSHEAR	102401	1063	2401	2451	2452	2402			
2343-	CSHEAR	102402	1063	2402	2452	2453	2403			
2344-	CSHEAR	102404	1070	2404	2454	2457	2407			
2345-	CSHEAR	102407	1070	2407	2457	2461	2411			
2346-	CSHEAR	102411	1070	2411	2461	2464	2414			
2347-	CSHEAR	102414	1070	2414	2464	2465	2415			
2348-	CSHEAR	102415	1070	2415	2465	2469	2419			
2349-	CSHEAR	102419	1070	2419	2469	2473	2423			
2350-	CSHEAR	102423	1070	2423	2473	2476	2426			

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
2351-	CSHEAR	102426	1070	2426	2476	2478	2428			
2352-	CSHEAR	102428	1050	2428	2478	2479	2429			
2353-	CSHEAR	102429	1050	2429	2479	2480	2430			
2354-	CSHEAR	102431	1050	2431	2481	2482	2432			
2355-	CSHEAR	102501	1063	2501	2551	2552	2502			
2356-	CSHEAR	102502	1063	2502	2552	2553	2503			
2357-	CSHEAR	102504	1081	2504	2554	2557	2507			
2358-	CSHEAR	102507	1081	2507	2557	2559	2509			
2359-	CSHEAR	102509	1081	2509	2559	2561	2511			
2360-	CSHEAR	102511	1081	2511	2561	2562	2512			
2361-	CSHEAR	102512	1081	2512	2562	2564	2514			
2362-	CSHEAR	102514	1081	2514	2564	2565	2515			
2363-	CSHEAR	102515	1081	2515	2565	2567	2517			
2364-	CSHEAR	102517	1081	2517	2567	2569	2519			
2365-	CSHEAR	102519	1081	2519	2569	2571	2521			
2366-	CSHEAR	102521	1081	2521	2571	2573	2523			
2367-	CSHEAR	102523	1081	2523	2573	2576	2526			
2368-	CSHEAR	102526	1081	2526	2576	2578	2528			
2369-	CSHEAR	102528	1050	2528	2578	2579	2529			
2370-	CSHEAR	102529	1050	2529	2579	2580	2530			
2371-	CSHEAR	102531	3125	2531	2581	2582	2532			
2372-	CSHEAR	102601	1125	2601	2651	2652	2602			
2373-	CSHEAR	102602	1125	2602	2652	2653	2603			
2374-	CSHEAR	102604	1071	2604	2654	2657	2607			
2375-	CSHEAR	102607	1071	2607	2657	2659	2609			
2376-	CSHEAR	102609	1071	2609	2659	2661	2611			
2377-	CSHEAR	102611	1071	2611	2661	2662	2612			
2378-	CSHEAR	102612	1071	2612	2662	2664	2614			
2379-	CSHEAR	102614	1071	2614	2664	2665	2615			
2380-	CSHEAR	102615	1071	2615	2665	2667	2617			
2381-	CSHEAR	102617	1071	2617	2667	2669	2619			
2382-	CSHEAR	102619	1071	2619	2669	2671	2621			
2383-	CSHEAR	102621	1071	2621	2671	2673	2623			
2384-	CSHEAR	102623	1071	2623	2673	2676	2626			
2385-	CSHEAR	102626	1071	2626	2576	2678	2628			
2386-	CSHEAR	102628	1050	2628	2678	2779	2729			
2387-	CSHEAR	102631	3125	2631	2681	2682	2632			
2388-	CSHEAR	102729	1050	2729	2779	2780	2730			
2389-	CSHEAR	102731	1050	2731	2781	2782	2732			
2390-	CSHEAR	102801	1063	2801	2851	2852	2802			
2391-	CSHEAR	102802	1063	2802	2852	2853	2803			
2392-	CSHEAR	102804	1071	2804	2854	2857	2807			
2393-	CSHEAR	102807	1071	2807	2857	2859	2809			
2394-	CSHEAR	102809	1071	2809	2859	2861	2811			
2395-	CSHEAR	102811	1071	2811	2861	2862	2812			
2396-	CSHEAR	102812	1071	2812	2862	2864	2814			
2397-	CSHEAR	102814	1071	2814	2864	2865	2815			
2398-	CSHEAR	102815	1071	2815	2865	2867	2817			
2399-	CSHEAR	102817	1071	2817	2867	2869	2819			
2400-	CSHEAR	102819	1071	2819	2869	2871	2821			

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
2401-	CSHEAR	102821	1071	2821	2871	2873	2823			
2402-	CSHEAR	102823	1071	2823	2873	2876	2826			
2403-	CSHEAR	102826	1071	2826	2876	2878	2828			
2404-	CSHEAR	102828	1050	2828	2878	2779	2729			
2405-	CSHEAR	102831	3093	2831	2881	2882	2832			
2406-	CSHEAR	102901	1063	2901	2951	2952	2902			
2407-	CSHEAR	102902	1063	2902	2952	2953	2903			
2408-	CSHEAR	102904	1071	2904	2954	2957	2907			
2409-	CSHEAR	102907	1071	2907	2957	2959	2909			
2410-	CSHEAR	102909	1071	2909	2959	2961	2911			
2411-	CSHEAR	102911	1071	2911	2961	2962	2912			
2412-	CSHEAR	102912	1071	2912	2962	2964	2914			
2413-	CSHEAR	102914	1071	2914	2964	2965	2915			
2414-	CSHEAR	102915	1071	2915	2965	2967	2917			
2415-	CSHEAR	102917	1071	2917	2967	2969	2919			
2416-	CSHEAR	102919	1071	2919	2969	2971	2921			
2417-	CSHEAR	102921	1071	2921	2971	2973	2923			
2418-	CSHEAR	102923	1071	2923	2973	2976	2926			
2419-	CSHEAR	102926	1071	2926	2976	2978	2928			
2420-	CSHEAR	102928	1050	2928	2978	2979	2929			
2421-	CSHEAR	102929	1050	2929	2979	2980	2930			
2422-	CSHEAR	102931	3093	2931	2981	2982	2932			
2423-	CSHEAR	103001	1063	3001	3051	3052	3002			
2424-	CSHEAR	103002	1063	3002	3052	3053	3003			
2425-	CSHEAR	103004	1071	3004	3054	3057	3007			
2426-	CSHEAR	103007	1071	3007	3057	3061	3011			
2427-	CSHEAR	103011	1071	3011	3061	3064	3014			
2428-	CSHEAR	103014	1071	3014	3064	3065	3015			
2429-	CSHEAR	103015	1071	3015	3065	3069	3019			
2430-	CSHEAR	103019	1071	3019	3069	3073	3023			
2431-	CSHEAR	103023	1071	3023	3073	3076	3026			
2432-	CSHEAR	103026	1071	3026	3076	3078	3028			
2433-	CSHEAR	103028	1050	3028	3078	3079	3029			
2434-	CSHEAR	103029	1050	3029	3079	3080	3030			
2435-	CSHEAR	103031	1050	3031	3081	3082	3032			
2436-	CSHEAR	103101	1063	3101	3151	3152	3102			
2437-	CSHEAR	103102	1063	3102	3152	3153	3103			
2438-	CSHEAR	103104	1063	3104	3154	3157	3107			
2439-	CSHEAR	103107	1063	3107	3157	3161	3111			
2440-	CSHEAR	103111	1063	3111	3161	3164	3114			
2441-	CSHEAR	103114	1063	3114	3164	3165	3115			
2442-	CSHEAR	103115	1063	3115	3165	3169	3119			
2443-	CSHEAR	103119	1063	3119	3169	3173	3123			
2444-	CSHEAR	103123	1063	3123	3173	3178	3128			
2445-	CSHEAR	103128	1050	3128	3178	3079	3029			
2446-	CSHEAR	103131	3086	3131	3181	3182	3132			
2447-	CSHEAR	103201	1063	3201	3251	3252	3202			
2448-	CSHEAR	103202	1063	3202	3252	3253	3203			
2449-	CSHEAR	103204	1050	3204	3254	3261	3211			
2450-	CSHEAR	103211	1050	3211	3261	3264	3214			

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
2451-	CSHEAR	103214	1050	3214	3264	3265	3215			
2452-	CSHEAR	103215	1050	3215	3265	3269	3219			
2453-	CSHEAR	103219	1050	3219	3269	3273	3223			
2454-	CSHEAR	103223	1050	3223	3273	3278	3228			
2455-	CSHEAR	103228	1050	3228	3278	3279	3229			
2456-	CSHEAR	103229	1050	3229	3279	3280	3230			
2457-	CSHEAR	103231	3086	3231	3281	3282	3232			
2458-	CSHEAR	103301	1063	3301	3351	3352	3302			
2459-	CSHEAR	103302	1063	3302	3352	3353	3303			
2460-	CSHEAR	103304	1051	3304	3354	3361	3311			
2461-	CSHEAR	103311	1051	3311	3361	3364	3314			
2462-	CSHEAR	103314	1051	3314	3364	3365	3315			
2463-	CSHEAR	103315	1051	3315	3365	3369	3319			
2464-	CSHEAR	103319	1051	3319	3369	3373	3323			
2465-	CSHEAR	103323	1051	3323	3373	3378	3328			
2466-	CSHEAR	103328	1050	3328	3378	3379	3329			
2467-	CSHEAR	103329	1050	3329	3379	3380	3330			
2468-	CSHEAR	103331	1050	3331	3381	3382	3332			
2469-	CSHEAR	103401	1125	3401	3451	3452	3402			
2470-	CSHEAR	103402	1125	3402	3452	3453	3403			
2471-	CSHEAR	103404	1040	3404	3454	3461	3411			
2472-	CSHEAR	103411	1040	3411	3461	3464	3414			
2473-	CSHEAR	103414	1040	3414	3464	3465	3415			
2474-	CSHEAR	103415	1040	3415	3465	3469	3419			
2475-	CSHEAR	103419	1040	3419	3469	3473	3423			
2476-	CSHEAR	103423	1040	3423	3473	3478	3428			
2477-	CSHEAR	103428	1050	3428	3478	3379	3329			
2478-	CSHEAR	103431	3076	3431	3481	3482	3432			
2479-	CSHEAR	103501	1063	3501	3551	3552	3502			
2480-	CSHEAR	103502	1063	3502	3552	3553	3503			
2481-	CSHEAR	103504	1048	3504	3554	3561	3511			
2482-	CSHEAR	103511	1040	3511	3561	3564	3514			
2483-	CSHEAR	103514	1040	3514	3564	3565	3515			
2484-	CSHEAR	103515	1040	3515	3565	3569	3519			
2485-	CSHEAR	103519	1040	3519	3569	3573	3523			
2486-	CSHEAR	103523	1040	3523	3573	3578	3528			
2487-	CSHEAR	103528	1050	3528	3578	3579	3529			
2488-	CSHEAR	103529	1050	3529	3579	3580	3530			
2489-	CSHEAR	103531	3076	3531	3581	3582	3532			
2490-	CSHEAR	103601	1063	3601	3651	3652	3602			
2491-	CSHEAR	103602	1063	3602	3652	3653	3603			
2492-	CSHEAR	103604	1040	3604	3654	3661	3611			
2493-	CSHEAR	103611	1040	3611	3661	3664	3614			
2494-	CSHEAR	103614	1040	3614	3664	3665	3615			
2495-	CSHEAR	103615	1040	3615	3665	3669	3619			
2496-	CSHEAR	103619	1040	3619	3669	3673	3623			
2497-	CSHEAR	103623	1040	3623	3673	3678	3628			
2498-	CSHEAR	103628	1050	3628	3678	3679	3629			
2499-	CSHEAR	103629	1050	3629	3679	3680	3630			
2500-	CSHEAR	103631	1050	3631	3681	3682	3632			

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
2501-	CSHEAR	103701	1063	3701	3751	3752	3702			
2502-	CSHEAR	103702	1063	3702	3752	3753	3703			
2503-	CSHEAR	103704	1040	3704	3754	3761	3711			
2504-	CSHEAR	103711	1040	3711	3761	3764	3714			
2505-	CSHEAR	103714	1040	3714	3764	3765	3715			
2506-	CSHEAR	103715	1040	3715	3765	3769	3719			
2507-	CSHEAR	103719	1040	3719	3769	3773	3723			
2508-	CSHEAR	103723	1040	3723	3773	3778	3728			
2509-	CSHEAR	103728	1050	3728	3778	3679	3629			
2510-	CSHEAR	103731	3071	3731	3781	3782	3732			
2511-	CSHEAR	103801	1063	3801	3851	3852	3802			
2512-	CSHEAR	103802	1063	3802	3852	3853	3803			
2513-	CSHEAR	103804	1040	3804	3854	3864	3814			
2514-	CSHEAR	103814	1040	3814	3864	3865	3815			
2515-	CSHEAR	103815	1040	3815	3865	3869	3819			
2516-	CSHEAR	103819	1040	3819	3869	3873	3823			
2517-	CSHEAR	103823	1040	3823	3873	3878	3828			
2518-	CSHEAR	103828	1050	3828	3878	3879	3829			
2519-	CSHEAR	103829	1050	3829	3879	3880	3830			
2520-	CSHEAR	103831	3071	3831	3881	3882	3832			
2521-	CSHEAR	103901	1063	3901	3951	3952	3902			
2522-	CSHEAR	103902	1063	3902	3952	3953	3903			
2523-	CSHEAR	103904	1050	3904	3954	3964	3914			
2524-	CSHEAR	103914	1050	3914	3964	3965	3915			
2525-	CSHEAR	103915	1050	3915	3965	3969	3919			
2526-	CSHEAR	103919	1050	3919	3969	3973	3923			
2527-	CSHEAR	103923	1050	3923	3973	3978	3928			
2528-	CSHEAR	103928	1050	3928	3978	3979	3929			
2529-	CSHEAR	103929	1050	3929	3979	3980	3930			
2530-	CSHEAR	103931	1050	3931	3981	3982	3932			
2531-	CSHEAR	104001	1063	4001	4051	4052	4002			
2532-	CSHEAR	104002	1063	4002	4052	4053	4003			
2533-	CSHEAR	104004	1040	4004	4054	4064	4014			
2534-	CSHEAR	104014	1040	4014	4064	4065	4015			
2535-	CSHEAR	104015	1040	4015	4065	4069	4019			
2536-	CSHEAR	104019	1040	4019	4069	4073	4023			
2537-	CSHEAR	104023	1040	4023	4073	4078	4028			
2538-	CSHEAR	104028	1050	4028	4078	3979	3929			
2539-	CSHEAR	104031	3061	4031	4081	4082	4032			
2540-	CSHEAR	104101	1125	4101	4151	4152	4102			
2541-	CSHEAR	104102	1125	4102	4152	4153	4103			
2542-	CSHEAR	104104	1040	4104	4154	4164	4114			
2543-	CSHEAR	104114	1040	4114	4164	4165	4115			
2544-	CSHEAR	104115	1040	4115	4165	4169	4119			
2545-	CSHEAR	104119	1040	4119	4169	4173	4123			
2546-	CSHEAR	104123	1040	4123	4173	4178	4128			
2547-	CSHEAR	104128	1050	4128	4178	4179	4129			
2548-	CSHEAR	104129	1050	4129	4179	4180	4130			
2549-	CSHEAR	104130	3061	4130	4180	4182	4132			
2550-	CSHEAR	104201	1063	4201	4251	4252	4202			

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
2551-	CSHEAR	104202	1063	4202	4252	4253	4203			
2552-	CSHEAR	104204	1040	4204	4254	4264	4214			
2553-	CSHEAR	104214	1040	4214	4264	4265	4215			
2554-	CSHEAR	104215	1040	4215	4265	4269	4219			
2555-	CSHEAR	104219	1040	4219	4269	4273	4223			
2556-	CSHEAR	104223	1040	4223	4273	4278	4228			
2557-	CSHEAR	104228	1050	4228	4278	4279	4229			
2558-	CSHEAR	104229	1050	4229	4279	4280	4230			
2559-	CSHEAR	104230	1050	4230	4280	4282	4232			
2560-	CSHEAR	104301	1063	4301	4351	4352	4302			
2561-	CSHEAR	104302	1063	4302	4352	4353	4303			
2562-	CSHEAR	104304	1040	4304	4354	4364	4314			
2563-	CSHEAR	104314	1040	4314	4364	4365	4315			
2564-	CSHEAR	104315	1040	4315	4365	4369	4319			
2565-	CSHEAR	104319	1040	4319	4369	4373	4323			
2566-	CSHEAR	104323	1040	4323	4373	4378	4328			
2567-	CSHEAR	104328	1050	4328	4378	4379	4329			
2568-	CSHEAR	104329	1050	4329	4379	4380	4330			
2569-	CSHEAR	104330	1050	4330	4380	4382	4332			
2570-	CSHEAR	104401	1063	4401	4451	4452	4402			
2571-	CSHEAR	104402	1063	4402	4452	4453	4403			
2572-	CSHEAR	104404	1040	4404	4454	4465	4415			
2573-	CSHEAR	104415	1040	4415	4465	4469	4419			
2574-	CSHEAR	104419	1040	4419	4469	4473	4423			
2575-	CSHEAR	104423	1040	4423	4473	4478	4428			
2576-	CSHEAR	104428	1050	4428	4478	4479	4429			
2577-	CSHEAR	104429	1050	4429	4479	4480	4430			
2578-	CSHEAR	104430	1050	4430	4480	4482	4432			
2579-	CSHEAR	104501	1063	4501	4551	4552	4502			
2580-	CSHEAR	104502	1063	4502	4552	4553	4503			
2581-	CSHEAR	104504	1040	4504	4554	4565	4515			
2582-	CSHEAR	104515	1040	4515	4565	4569	4519			
2583-	CSHEAR	104519	1040	4519	4569	4573	4523			
2584-	CSHEAR	104523	1040	4523	4573	4578	4528			
2585-	CSHEAR	104528	1050	4528	4578	4579	4529			
2586-	CSHEAR	104529	1050	4529	4579	4580	4530			
2587-	CSHEAR	104530	1050	4530	4580	4582	4532			
2588-	CSHEAR	104601	1063	4601	4651	4652	4602			
2589-	CSHEAR	104602	1063	4602	4652	4653	4603			
2590-	CSHEAR	104604	1050	4604	4654	4665	4615			
2591-	CSHEAR	104611	1063	4611	4661	4662	4612			
2592-	CSHEAR	104612	1063	4612	4662	4654	4604			
2593-	CSHEAR	104615	1050	4615	4665	4669	4619			
2594-	CSHEAR	104619	1050	4619	4669	4673	4623			
2595-	CSHEAR	104623	1050	4623	4673	4678	4628			
2596-	CSHEAR	104628	1050	4628	4678	4679	4629			
2597-	CSHEAR	104629	1050	4629	4679	4680	4630			
2598-	CSHEAR	104630	1050	4630	4680	4682	4632			
2599-	CSHEAR	104701	1125	4701	4751	4752	4702			
2600-	CSHEAR	104702	1125	4702	4752	4754	4704			

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
2601-	CSHEAR	104704	1040	4704	4754	4765	4715			
2602-	CSHEAR	104715	1040	4715	4765	4769	4719			
2603-	CSHEAR	104719	1040	4719	4769	4773	4723			
2604-	CSHEAR	104723	1040	4723	4773	4778	4728			
2605-	CSHEAR	104728	1050	4728	4778	4779	4729			
2606-	CSHEAR	104729	1050	4729	4779	4780	4730			
2607-	CSHEAR	104730	1050	4730	4780	4782	4732			
2608-	CSHEAR	301804	2600	1804	1904	1954	1854			
2609-	CSHEAR	301815	2350	1815	1915	1965	1865			
2610-	CSHEAR	301828	2250	1828	1928	1978	1878			
2611-	CSHEAR	301904	2600	1904	2004	2054	1954			
2612-	CSHEAR	301915	2300	1915	2015	2065	1965			
2613-	CSHEAR	301928	2250	1928	2028	2078	1978			
2614-	CSHEAR	302004	1280	2004	2104	2154	2054			
2615-	CSHEAR	302015	1260	2015	2115	2165	2065			
2616-	CSHEAR	302028	1320	2028	2128	2178	2078			
2617-	CSHEAR	302030	1050	2030	2130	2180	2080			
2618-	CSHEAR	302032	1050	2032	2132	2182	2082			
2619-	CSHEAR	302033	1050	2032	2133	2183	2082			
2620-	CSHEAR	302104	1250	2104	2204	2254	2154			
2621-	CSHEAR	302128	1290	2128	2228	2278	2178			
2622-	CSHEAR	302130	1050	2130	2230	2280	2180			
2623-	CSHEAR	302132	1050	2132	2232	2282	2182			
2624-	CSHEAR	302204	1340	2204	2304	2354	2254			
2625-	CSHEAR	302228	1260	2228	2328	2378	2278			
2626-	CSHEAR	302230	1050	2230	2430	2480	2280			
2627-	CSHEAR	302304	1225	2304	2404	2454	2354			
2628-	CSHEAR	302328	1240	2328	2428	2478	2378			
2629-	CSHEAR	302331	1050	2331	2431	2481	2381			
2630-	CSHEAR	302332	1050	2332	2432	2482	2382			
2631-	CSHEAR	302404	1180	2404	2504	2554	2454			
2632-	CSHEAR	302428	1240	2428	2528	2578	2478			
2633-	CSHEAR	302430	1050	2430	2530	2580	2480			
2634-	CSHEAR	302431	1050	2431	2531	2581	2481			
2635-	CSHEAR	302432	1050	2432	2532	2582	2482			
2636-	CSHEAR	302504	1200	2504	2604	2654	2554			
2637-	CSHEAR	302528	1220	2528	2628	2678	2578			
2638-	CSHEAR	302530	1050	2530	2730	2780	2580			
2639-	CSHEAR	302604	1170	2604	2704	2754	2654			
2640-	CSHEAR	302628	1200	2628	2728	2778	2678			
2641-	CSHEAR	302631	1050	2631	2731	2781	2681			
2642-	CSHEAR	302632	1050	2632	2732	2782	2682			
2643-	CSHEAR	302704	1170	2704	2804	2854	2754			
2644-	CSHEAR	302728	1200	2728	2828	2878	2778			
2645-	CSHEAR	302730	1050	2730	2930	2980	2780			
2646-	CSHEAR	302731	1050	2731	2831	2881	2781			
2647-	CSHEAR	302732	1050	2732	2832	2882	2782			
2648-	CSHEAR	302804	1214	2804	2904	2954	2854			
2649-	CSHEAR	302828	1200	2828	2928	2978	2878			
2650-	CSHEAR	302904	1160	2904	3004	3054	2954			

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
2651-	CSHEAR	302928	1190	2928	3028	3078	2978			
2652-	CSHEAR	302930	1050	2930	3030	3080	2980			
2653-	CSHEAR	302931	1050	2931	3031	3081	2981			
2654-	CSHEAR	302932	1050	2932	3032	3082	2982			
2655-	CSHEAR	303004	1182	3004	3104	3154	3054			
2656-	CSHEAR	303028	1180	3028	3128	3178	3078			
2657-	CSHEAR	303030	1050	3030	3130	3180	3080			
2658-	CSHEAR	303031	1050	3031	3131	3181	3081			
2659-	CSHEAR	303032	1050	3032	3132	3182	3082			
2660-	CSHEAR	303104	1150	3104	3204	3254	3154			
2661-	CSHEAR	303128	1180	3128	3228	3278	3178			
2662-	CSHEAR	303204	1138	3204	3304	3354	3254			
2663-	CSHEAR	303228	1180	3228	3328	3378	3278			
2664-	CSHEAR	303230	1050	3230	3330	3380	3280			
2665-	CSHEAR	303231	1050	3231	3331	3381	3281			
2666-	CSHEAR	303232	1050	3232	3332	3382	3282			
2667-	CSHEAR	303304	1181	3304	3404	3454	3354			
2668-	CSHEAR	303328	1170	3328	3428	3478	3378			
2669-	CSHEAR	303330	1050	3330	3430	3480	3380			
2670-	CSHEAR	303331	1050	3331	3431	3481	3381			
2671-	CSHEAR	303332	1050	3332	3432	3482	3382			
2672-	CSHEAR	303404	1135	3404	3504	3554	3454			
2673-	CSHEAR	303428	1150	3428	3528	3578	3478			
2674-	CSHEAR	303504	1174	3504	3604	3654	3554			
2675-	CSHEAR	303528	1130	3528	3628	3678	3578			
2676-	CSHEAR	303530	1050	3530	3630	3680	3580			
2677-	CSHEAR	303531	1050	3531	3631	3681	3581			
2678-	CSHEAR	303532	1050	3532	3632	3682	3582			
2679-	CSHEAR	303604	1135	3604	3704	3754	3654			
2680-	CSHEAR	303628	1130	3628	3728	3778	3678			
2681-	CSHEAR	303630	1050	3630	3730	3780	3680			
2682-	CSHEAR	303631	1050	3631	3731	3781	3681			
2683-	CSHEAR	303632	1050	3632	3732	3782	3682			
2684-	CSHEAR	303704	1212	3704	3804	3854	3754			
2685-	CSHEAR	303728	1120	3728	3828	3878	3778			
2686-	CSHEAR	303804	1130	3804	3904	3954	3854			
2687-	CSHEAR	303828	1100	3828	3928	3978	3878			
2688-	CSHEAR	303830	1050	3830	3930	3980	3880			
2689-	CSHEAR	303831	1050	3831	3931	3981	3881			
2690-	CSHEAR	303832	1050	3832	3932	3982	3882			
2691-	CSHEAR	303904	1220	3904	4004	4054	3954			
2692-	CSHEAR	303928	1110	3928	4028	4078	3978			
2693-	CSHEAR	303930	1050	3930	4130	4180	3980			
2694-	CSHEAR	303931	1050	3931	4031	4081	3981			
2695-	CSHEAR	303932	1050	3932	4032	4082	3982			
2696-	CSHEAR	304004	1140	4004	4104	4154	4054			
2697-	CSHEAR	304028	1100	4028	4128	4178	4078			
2698-	CSHEAR	304104	1170	4104	4204	4254	4154			
2699-	CSHEAR	304128	1100	4128	4228	4278	4178			
2700-	CSHEAR	304130	1050	4130	4230	4280	4180			

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
2701-	CSHEAR	304132	1050	4132	4232	4282	4182			
2702-	CSHEAR	304204	1130	4204	4304	4354	4254			
2703-	CSHEAR	304228	1100	4228	4328	4378	4278			
2704-	CSHEAR	304230	1050	4230	4330	4380	4280			
2705-	CSHEAR	304232	1050	4232	4332	4382	4282			
2706-	CSHEAR	304304	1127	4304	4404	4454	4354			
2707-	CSHEAR	304328	1100	4328	4428	4478	4378			
2708-	CSHEAR	304330	1050	4330	4430	4480	4380			
2709-	CSHEAR	304332	1050	4332	4432	4482	4382			
2710-	CSHEAR	304404	1127	4404	4504	4554	4454			
2711-	CSHEAR	304428	1090	4428	4528	4578	4478			
2712-	CSHEAR	304430	1050	4430	4530	4580	4480			
2713-	CSHEAR	304432	1050	4432	4532	4582	4482			
2714-	CSHEAR	304504	1113	4504	4604	4654	4554			
2715-	CSHEAR	304528	1090	4528	4628	4678	4578			
2716-	CSHEAR	304530	1050	4530	4630	4680	4580			
2717-	CSHEAR	304532	1050	4532	4632	4682	4582			
2718-	CSHEAR	304604	1175	4604	4704	4754	4654			
2719-	CSHEAR	304628	1090	4628	4728	4778	4678			
2720-	CSHEAR	304630	1050	4630	4730	4780	4680			
2721-	CSHEAR	304632	1050	4632	4732	4782	4682			
2722-	CTRIA2	211104	21804	1104	1703	1704				
2723-	CTRIA2	211114	21804	1114	1728	1729				
2724-	CTRIA2	211154	22770	1154	1753	1754				
2725-	CTRIA2	211164	22770	1164	1778	1779				
2726-	CTRIA2	211204	21804	1204	1104	1704				
2727-	CTRIA2	211205	21804	1205	1204	1304				
2728-	CTRIA2	211213	21804	1213	1314	1214				
2729-	CTRIA2	211214	21804	1214	1314	1723				
2730-	CTRIA2	211254	22770	1254	1154	1754				
2731-	CTRIA2	211255	23196	1255	1254	1354				
2732-	CTRIA2	211263	23196	1263	1364	1264				
2733-	CTRIA2	211264	23196	1264	1364	1773				
2734-	CTRIA2	211303	22406	1303	1304	1707				
2735-	CTRIA2	211304	21804	1304	1204	1707				
2736-	CTRIA2	211305	21804	1305	1205	1304				
2737-	CTRIA2	211313	21804	1313	1314	1213				
2738-	CTRIA2	211314	22406	1314	1315	1719				
2739-	CTRIA2	211315	22406	1315	1717	1719				
2740-	CTRIA2	211353	23196	1353	1354	1757				
2741-	CTRIA2	211354	23196	1354	1254	1757				
2742-	CTRIA2	211355	23196	1355	1255	1354				
2743-	CTRIA2	211363	23196	1363	1364	1263				
2744-	CTRIA2	211364	23196	1364	1365	1769				
2745-	CTRIA2	211365	23196	1365	1767	1769				
2746-	CTRIA2	211707	21804	1707	1204	1704				
2747-	CTRIA2	211711	21804	1711	1303	1707				
2748-	CTRIA2	211714	22406	1714	1303	1711				
2749-	CTRIA2	211715	21770	1715	1815	1717				
2750-	CTRIA2	211717	21770	1717	1815	1819				

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
2751-	CTRIA2	211719	21804	1719	1723	1314				
2752-	CTRIA2	211723	21804	1723	1726	1214				
2753-	CTRIA2	211726	21804	1726	1728	1214				
2754-	CTRIA2	211728	21804	1728	1114	1214				
2755-	CTRIA2	211757	23196	1757	1754	1754				
2756-	CTRIA2	211761	23196	1761	1353	1757				
2757-	CTRIA2	211764	23196	1764	1353	1761				
2758-	CTRIA2	211765	22770	1765	1865	1767				
2759-	CTRIA2	211767	22770	1767	1865	1869				
2760-	CTRIA2	211769	23196	1769	1773	1364				
2761-	CTRIA2	211773	23196	1773	1776	1264				
2762-	CTRIA2	211776	22770	1776	1778	1264				
2763-	CTRIA2	211778	22770	1778	1164	1264				
2764-	CTRIA2	211819	21770	1719	1717	1819				
2765-	CTRIA2	211869	22770	1769	1767	1869				
2766-	CTRMEM	112232	3056	2232	2282	2233				
2767-	CTRMEM	112332	3056	2332	2382	2333				
2768-	CTRMEM	112532	3088	2532	2582	2533				
2769-	CTRMEM	112632	3088	2632	2682	2633				
2770-	CTRMEM	112832	3050	2832	2882	2833				
2771-	CTRMEM	112932	3050	2932	2982	2933				
2772-	CTRMEM	113132	3058	3132	3182	3133				
2773-	CTRMEM	113232	3058	3232	3282	3233				
2774-	CTRMEM	113432	3050	3432	3482	3433				
2775-	CTRMEM	113532	3050	3532	3582	3533				
2776-	CTRMEM	113732	3050	3732	3782	3733				
2777-	CTRMEM	113832	3050	3832	3882	3833				
2778-	CTRMEM	114032	3050	4032	4082	4033				
2779-	CTRMEM	114132	3050	4132	4182	4133				
2780-	CTRMEM	212032	1050	2032	2132	2133				
2781-	CTRMEM	212082	1050	2082	2182	2183				
2782-	CTRMEM	212328	4055	2328	2428	2429				
2783-	CTRMEM	212378	1125	2378	2478	2479				
2784-	CTRMEM	212407	1436	2407	2507	2509				
2785-	CTRMEM	212408	1436	2407	2509	2411				
2786-	CTRMEM	212409	1436	2411	2509	2511				
2787-	CTRMEM	212411	1436	2411	2511	2512				
2788-	CTRMEM	212412	1436	2411	2512	2414				
2789-	CTRMEM	212413	1436	2414	2512	2514				
2790-	CTRMEM	212415	1436	2415	2515	2517				
2791-	CTRMEM	212416	1436	2415	2517	2419				
2792-	CTRMEM	212417	1436	2419	2517	2519				
2793-	CTRMEM	212419	1436	2419	2519	2521				
2794-	CTRMEM	212420	1436	2419	2521	2423				
2795-	CTRMEM	212421	1436	2423	2521	2523				
2796-	CTRMEM	212457	1481	2457	2557	2559				
2797-	CTRMEM	212458	1481	2457	2559	2461				
2798-	CTRMEM	212459	1481	2461	2559	2561				
2799-	CTRMEM	212461	1559	2461	2561	2562				
2800-	CTRMEM	212462	1559	2461	2562	2464				

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
2801-	CTRMEM	212463	1559	2464	2562	2564				
2802-	CTRMEM	212465	1575	2465	2565	2567				
2803-	CTRMEM	212466	1575	2465	2567	2469				
2804-	CTRMEM	212467	1575	2469	2567	2569				
2805-	CTRMEM	212469	1957	2469	2569	2571				
2806-	CTRMEM	212470	1957	2469	2571	2473				
2807-	CTRMEM	212471	1957	2473	2571	2573				
2808-	CTRMEM	212628	4055	2628	2828	2729				
2809-	CTRMEM	212678	1125	2678	2878	2779				
2810-	CTRMEM	212907	1342	2907	3007	2909				
2811-	CTRMEM	212909	1342	2909	3007	3011				
2812-	CTRMEM	212910	1342	2909	3011	2911				
2813-	CTRMEM	212911	1342	2911	3011	2912				
2814-	CTRMEM	212912	1342	2912	3011	3014				
2815-	CTRMEM	212913	1342	2912	3014	2914				
2816-	CTRMEM	212915	1342	2915	3015	2917				
2817-	CTRMEM	212917	1342	2917	3015	3019				
2818-	CTRMEM	212918	1342	2917	3019	2919				
2819-	CTRMEM	212919	1342	2919	3019	2921				
2820-	CTRMEM	212921	1342	2921	3019	3023				
2821-	CTRMEM	212922	1342	2921	3023	2923				
2822-	CTRMEM	212957	1355	2957	3057	2959				
2823-	CTRMEM	212959	1355	2959	3057	3061				
2824-	CTRMEM	212960	1355	2959	3061	2961				
2825-	CTRMEM	212961	1355	2961	3061	2962				
2826-	CTRMEM	212962	1355	2962	3061	3064				
2827-	CTRMEM	212963	1355	2962	3064	2964				
2828-	CTRMEM	212965	1355	2965	3065	2967				
2829-	CTRMEM	212967	1355	2967	3065	3069				
2830-	CTRMEM	212968	1355	2967	3069	2969				
2831-	CTRMEM	212969	1355	2969	3069	2971				
2832-	CTRMEM	212971	1355	2971	3069	3073				
2833-	CTRMEM	212972	1355	2971	3073	2973				
2834-	CTRMEM	213028	4055	3028	3128	3029				
2835-	CTRMEM	213078	1150	3078	3178	3079				
2836-	CTRMEM	213328	4055	3328	3428	3329				
2837-	CTRMEM	213378	1150	3378	3478	3379				
2838-	CTRMEM	213628	4055	3628	3728	3629				
2839-	CTRMEM	213678	1150	3678	3778	3679				
2840-	CTRMEM	213928	4055	3928	4128	3929				
2841-	CTRMEM	213978	1150	3978	4078	3979				
2842-	CTRMEM	214701	1060	4701	4804	4702				
2843-	CTRMEM	214702	1060	4702	4804	4704				
2844-	CTRMEM	214751	1050	4751	4804	4752				
2845-	CTRMEM	214752	1050	4752	4804	4754				
2846-	CTRMEM	312133	1050	2133	2233	2183				
2847-	CTRMEM	314701	1050	4701	4804	4751				
2848-	CTRMEM	314704	1040	4704	4804	4754				
2849-	CTRMEM	314728	1040	4728	4828	4778				
2850-	FORCE	38	2104		0.001	-1.731562.45E90 78.23647				

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
2851-	FORCE	38	2107		0.001	-9.6489013.69071435.9614				
2852-	FORCE	38	2207		0.001	-10.735615.23272485.0647				
2853-	FORCE	39	2315		0.001	-1.668262.36707 75.37602				
2854-	FORCE	39	2414		0.001	1.43391 -2.03456-64.7878				
2855-	FORCE	39	2415		0.001	-21.881731.04782988.6748				
2856-	FORCE	40	2623		0.001	-0.65732.93267 29.69952				
2857-	FORCE	40	2626		0.001	-14.209320.16151642.0156				
2858-	FORCE	40	2826		0.001	-7.2494310.28613327.5476				
2859-	FORCE	41	2931		0.001	-7.1805010.18833324.4331				
2860-	FORCE	41	2932		0.001	-5.702398.09106 257.6484				
2861-	FORCE	41	3031		0.001	-9.2332313.10092417.1806				
2862-	FORCE	42	3032		0.001	-3.495104.95916 157.9176				
2863-	FORCE	42	3132		0.001	-10.028814.22983453.1289				
2864-	FORCE	42	3133		0.001	-8.5921712.19133388.2158				
2865-	FORCE	43	2201		0.001	-3.023124.28947 136.5923				
2866-	FORCE	43	2202		0.001	-14.556320.65379657.6916				
2867-	FORCE	43	2402		0.001	-4.536686.43704 204.9786				
2868-	FORCE	44	2407		0.001	-6.507889.23396 294.0424				
2869-	FORCE	44	2504		0.001	-3.198954.53896 144.5369				
2870-	FORCE	44	2507		0.001	-12.409217.60739560.6831				
2871-	FORCE	45	2814		0.001	-2.359753.34823 106.6196				
2872-	FORCE	45	2815		0.001	-14.037127.01154860.1450				
2873-	FORCE	45	2915		0.001	-0.719261.02055 32.49791				
2874-	FORCE	46	3023		0.001	-9.3602213.28111422.9184				
2875-	FORCE	46	3028		0.001	-4.482016.35948 202.5087				
2876-	FORCE	46	3128		0.001	-8.2738911.73973373.8354				
2877-	FORCE	47	3231		0.001	-9.0158212.79244407.3574				
2878-	FORCE	47	3232		0.001	-4.341406.15996 196.1552				
2879-	FORCE	47	3331		0.001	-8.7589212.42793395.7502				
2880-	FORCE	48	3332		0.001	-5.621327.97603 253.9854				
2881-	FORCE	48	3432		0.001	-8.3758011.88432378.4397				
2882-	FORCE	48	3433		0.001	-8.1190211.51998366.8376				
2883-	FORCE	49	2601		0.001	-3.096354.39338 139.9009				
2884-	FORCE	49	2602		0.001	-10.862726.76418852.2683				
2885-	FORCE	49	2802		0.001	-0.15699.22276 7.09334				
2886-	FORCE	50	2907		0.001	-4.511806.40175 203.8547				
2887-	FORCE	50	2909		0.001	-14.176520.11493640.5322				
2888-	FORCE	50	3007		0.001	-3.427794.86365 154.8761				
2889-	FORCE	51	3115		0.001	-13.298818.86961600.8769				
2890-	FORCE	51	3119		0.001	-2.178733.09138 98.44058				
2891-	FORCE	51	3215		0.001	-6.638519.41931 299.9445				
2892-	FORCE	52	3323		0.001	-8.0773911.46091364.9567				
2893-	FORCE	52	3328		0.001	-3.929335.57528 177.5369				
2894-	FORCE	52	3428		0.001	-10.109414.34414456.7690				
2895-	FORCE	53	3531		0.001	-10.397814.75342469.8020				
2896-	FORCE	53	3532		0.001	-4.340826.15914 196.1291				
2897-	FORCE	53	3631		0.001	-7.3774410.46777333.3313				
2898-	FORCE	54	3632		0.001	-8.5979312.19950388.4760				
2899-	FORCE	54	3732		0.001	-5.345657.58488 241.5298				
2900-	FORCE	54	3733		0.001	-8.1725611.59596369.2570				

SORTED BULK DATA ECHO

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CARD
COUNT      .  1  ..  2  ..  3  ..  4  ..  5  ..  6  ..  7  ..  8  ..  9  .. 10  .
2901-      FORCE   55       3002            0.001   -6.070988.61404 274.3022
2902-      FORCE   55       3101            0.001   -3.209194.55349 144.9994
2903-      FORCE   55       3102            0.001   -12.835918.21278579.9611
2904-      FORCE   56       3211            0.001   -7.032609.97847 317.7504
2905-      FORCE   56       3304            0.001   -4.399906.24297 198.7986
2906-      FORCE   56       3311            0.001   -10.683615.15888482.7133
2907-      FORCE   57       3415            0.001   -7.8627311.15634355.2580
2908-      FORCE   57       3515            0.001   -7.7977811.06418352.3232
2909-      FORCE   57       3519            0.001   -6.455629.15981 291.6811
2910-      FORCE   58       3628            0.001   -7.5496210.71207341.1110
2911-      FORCE   58       3723            0.001   -6.668179.46140 301.2849
2912-      FORCE   58       3728            0.001   -7.8983211.20684356.8662
2913-      FORCE   59       3831            0.001   -9.7273113.80197439.5043
2914-      FORCE   59       3832            0.001   -4.304786.10801 194.5010
2915-      FORCE   59       3931            0.001   -8.0840311.47034365.2570
2916-      FORCE   60       3932            0.001   -9.8833614.02338446.5549
2917-      FORCE   60       4032            0.001   -4.036115.72679 182.3616
2918-      FORCE   60       4033            0.001   -8.1966611.63015370.3457
2919-      FORCE   61       3401            0.001   -3.204924.54742 144.8062
2920-      FORCE   61       3402            0.001   -12.887018.28532582.2707
2921-      FORCE   61       3502            0.001   -6.024148.54756 272.1857
2922-      FORCE   62       3611            0.001   -8.0346511.40027363.0258
2923-      FORCE   62       3614            0.001   -6.718849.53329 303.5742
2924-      FORCE   62       3711            0.001   -7.3626310.44676332.6623
2925-      FORCE   63       3815            0.001   -8.2040711.64066370.6804
2926-      FORCE   63       3819            0.001   -10.799015.32261487.9272
2927-      FORCE   63       3915            0.001   -3.113034.41705 140.6547
2928-      FORCE   64       3923            0.001   -0.27159.38536  12.27122
2929-      FORCE   64       4023            0.001   -3.604225.11399 162.8478
2930-      FORCE   64       4028            0.001   -18.240325.88098824.1438
2931-      FORCE   65       4130            0.001   -6.062108.60144 273.9008
2932-      FORCE   65       4230            0.001   -11.644316.52196526.1191
2933-      FORCE   65       4232            0.001   -4.409736.25691 199.2425
2934-      FORCE   66       4332            0.001   -6.404919.08785 289.3898
2935-      FORCE   66       4333            0.001   -7.8761711.17541355.8652
2936-      FORCE   66       4432            0.001   -7.8350511.11706354.0073
2937-      FORCE   67       3801            0.001   -3.328704.72306 150.3992
2938-      FORCE   67       3802            0.001   -7.9217011.24002357.9226
2939-      FORCE   67       3902            0.001   -10.865715.41726490.9411
2940-      FORCE   68       4004            0.001   -5.153397.31209 232.8432
2941-      FORCE   68       4014            0.001   -14.856121.07922671.2385
2942-      FORCE   68       4114            0.001   -2.106582.98901 95.18079
2943-      FORCE   69       4115            0.001   -5.708848.10021 257.9399
2944-      FORCE   69       4215            0.001   -1.250851.77482 56.51660
2945-      FORCE   69       4219            0.001   -15.156421.50528684.8059
2946-      FORCE   70       4323            0.001   .43910  -0.62304-19.8398
2947-      FORCE   70       4328            0.001   -13.459419.09750608.1337
2948-      FORCE   70       4428            0.001   -9.0957412.90584410.9685
2949-      FORCE   71       4430            0.001   -0.827551.17420 37.39087
2950-      FORCE   71       4530            0.001   -16.943924.04163765.5725
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SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
2951-	FORCE	71	4532		0.001	-4.344586.	16448	196.2993		
2952-	FORCE	72	4632		0.001	-8.1541311.	5698	1368.4243		
2953-	FORCE	72	4633		0.001	-7.8624911.	15600	355.2470		
2954-	FORCE	72	4732		0.001	-6.099508.	65452	275.5910		
2955-	FORCE	73	4102		0.001	-9.1918013.	04214	415.3088		
2956-	FORCE	73	4201		0.001	-7.9291211.	25053	358.2575		
2957-	FORCE	73	4202		0.001	-4.995207.	08764	225.6959		
2958-	FORCE	74	4304		0.001	-5.897548.	36796	266.4658		
2959-	FORCE	74	4314		0.001	-7.8558811.	14663	354.9487		
2960-	FORCE	74	4404		0.001	-8.3627011.	86574	377.8479		
2961-	FORCE	75	4415		0.001	-9.0925412.	90130	410.8239		
2962-	FORCE	75	4515		0.001	-8.3152611.	79843	375.7043		
2963-	FORCE	75	4519		0.001	-4.708326.	68058	212.7339		
2964-	FORCE	76	4519		0.001	-4.403026.	24740	198.9396		
2965-	FORCE	76	4619		0.001	-5.869278.	32784	265.1882		
2966-	FORCE	76	4623		0.001	-11.843816.	80508	535.1345		
2967-	FORCE	77	4628		0.001	-6.148878.	72456	277.8215		
2968-	FORCE	77	4728		0.001	-2.834104.	02127	128.0517		
2969-	FORCE	77	4729		0.001	-13.133118.	63449	593.3894		
2970-	FORCE	78	4730		0.001	-9.7621813.	85144	441.0798		
2971-	FORCE	78	4830		0.001	-9.2970113.	19143	420.0625		
2972-	FORCE	78	4832		0.001	-3.056934.	33745	138.1199		
2973-	FORCE	79	4501		0.001	-9.6505913.	69310	436.0378		
2974-	FORCE	79	4502		0.001	-4.494386.	37703	203.0677		
2975-	FORCE	79	4601		0.001	-7.9711611.	31018	360.1569		
2976-	FORCE	80	4502		0.001	-1.997452.	83416	90.24982		
2977-	FORCE	80	4601		0.001	-0.63426.	89995	28.65756		
2978-	FORCE	80	4602		0.001	-19.484427.	64621	880.3554		
2979-	FORCE	81	4604		0.001	-6.937629.	84371	313.4589		
2980-	FORCE	81	4612		0.001	-5.024557.	12928	227.0219		
2981-	FORCE	81	4704		0.001	-10.153914.	40733	458.7812		
2982-	FORCE	82	4604		0.001	-0.46974.	66650	21.22383		
2983-	FORCE	82	4704		0.001	-10.015814.	21134	452.5402		
2984-	FORCE	82	4715		0.001	-11.630516.	50247	525.4985		
2985-	FORCE	83	4715		0.001	-8.9925312.	75940	406.3054		
2986-	FORCE	83	4719		0.001	-4.309746.	11504	194.7249		
2987-	FORCE	83	4815		0.001	-8.8138512.	50588	398.2321		
2988-	FORCE	84	4719		0.001	-4.668006.	62338	210.9123		
2989-	FORCE	84	4815		0.001	-7.1148310.	09515	321.4658		
2990-	FORCE	84	4819		0.001	-10.333314.	66180	466.8845		
2991-	GRID	1000		139.50	-49.732	17.4588		456		
2992-	GRID	1050		139.52	-49.876	-4.7163		456		
2993-	GRID	1099		83.186	-55.941	4.698				
2994-	GRID	1104		145.41	-73.137	17.0614		6		
2995-	GRID	1105		139.50	-70.094	17.2962		6		
2996-	GRID	1106		132.56	-66.506	17.5719		6		
2997-	GRID	1107		126.67	-62.572	17.8129		6		
2998-	GRID	1108		122.74	-56.688	17.9998		6		
2999-	GRID	1109		121.36	-49.737	18.1045		6		
3000-	GRID	1110		122.74	-42.790	18.1109		6		

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3001-	GRID	1111		126.67	-36.90	18.0180	6			
3002-	GRID	1112		132.56	-32.966	17.8398	6			
3003-	GRID	1113		139.50	-28.755	17.6264	6			
3004-	GRID	1114		145.36	-25.208	17.4462	6			
3005-	GRID	1154		145.42	-74.538	-4.2535	6			
3006-	GRID	1155		139.52	-72.388	-4.4696	6			
3007-	GRID	1156		131.42	-69.434	-4.7663	6			
3008-	GRID	1157		124.56	-64.847	-5.0405	6			
3009-	GRID	1158		119.98	-57.981	-5.2652	6			
3010-	GRID	1159		118.37	-49.882	-5.4065	6			
3011-	GRID	1160		119.98	-41.781	-5.4427	6			
3012-	GRID	1161		124.56	-34.915	-5.3685	6			
3013-	GRID	1162		131.42	-30.325	-5.1950	6			
3014-	GRID	1163		139.52	-26.584	-4.9716	6			
3015-	GRID	1164		145.22	-23.952	-4.8144	6			
3016-	GRID	1204		145.40	-67.729	17.1051	6			
3017-	GRID	1205		139.50	-66.080	17.3282	6			
3018-	GRID	1206		133.62	-63.945	17.5546	6			
3019-	GRID	1207		128.63	-60.608	17.7589	6			
3020-	GRID	1208		125.30	-55.623	17.9172	6			
3021-	GRID	1209		124.13	-49.737	18.0059	6			
3022-	GRID	1210		125.30	-43.852	18.0113	6			
3023-	GRID	1211		128.63	-38.865	17.9326	6			
3024-	GRID	1212		133.62	-35.525	17.7816	6			
3025-	GRID	1213		139.50	-33.637	17.5874	6			
3026-	GRID	1214		145.35	-31.679	17.3948	6			
3027-	GRID	1254		145.32	-68.798	-4.3197	6			
3028-	GRID	1255		139.52	-67.343	-4.5249	6			
3029-	GRID	1256		132.94	-65.766	-4.7569	6			
3030-	GRID	1257		127.37	-64.038	-4.9796	6			
3031-	GRID	1258		123.64	-56.466	-5.1624	6			
3032-	GRID	1259		122.34	-49.881	-5.2770	6			
3033-	GRID	1260		123.64	-43.301	-5.3066	6			
3034-	GRID	1261		127.37	-37.723	-5.2460	6			
3035-	GRID	1262		132.94	-33.996	-5.1051	6			
3036-	GRID	1263		139.52	-32.377	-4.9081	6			
3037-	GRID	1264		145.22	-30.876	-4.7386	6			
3038-	GRID	1303		148.365	-59.267	17.0671	6			
3039-	GRID	1304		143.39	-62.534	17.2195	6			
3040-	GRID	1305		139.50	-62.328	17.3582	6			
3041-	GRID	1306		134.68	-61.380	17.5374	6			
3042-	GRID	1307		130.59	-58.652	17.7047	6			
3043-	GRID	1308		127.86	-54.562	17.8346	6			
3044-	GRID	1309		126.90	-49.737	17.9073	6			
3045-	GRID	1310		127.86	-44.909	17.9117	6			
3046-	GRID	1311		130.59	-40.819	17.8472	6			
3047-	GRID	1312		134.68	-38.085	17.7234	6			
3048-	GRID	1313		139.51	-37.122	17.5596	6			
3049-	GRID	1314		143.45	-37.031	17.4197	6			
3050-	GRID	1315		148.365	-40.209	17.2194	6			

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
3051-	GRID	1353		148.79	-59.148	-4.3122	6			
3052-	GRID	1354		144.54	-61.986	-4.4198	6			
3053-	GRID	1355		139.52	-62.987	-4.5726	6			
3054-	GRID	1356		134.51	-61.997	-4.7470	6			
3055-	GRID	1357		130.25	-59.152	-4.9172	6			
3056-	GRID	1358		127.41	-54.903	-5.0565	6			
3057-	GRID	1359		126.41	-49.883	-5.1441	6			
3058-	GRID	1360		127.41	-44.861	-5.1665	6			
3059-	GRID	1361		130.25	-40.604	-5.1205	6			
3060-	GRID	1362		134.50	-37.759	-5.0130	6			
3061-	GRID	1363		139.52	-36.762	-4.8601	6			
3062-	GRID	1364		144.54	-37.755	-4.6854	6			
3063-	GRID	1365		148.79	-40.601	-4.5155	6			
3064-	GRID	1401		149.31	-49.730	17.1097	6			
3065-	GRID	1402		148.56	-53.486	17.1064	6			
3066-	GRID	1403		146.44	-56.671	17.1564	6			
3067-	GRID	1404		143.26	-58.799	17.2526	6			
3068-	GRID	1405		139.50	-59.547	17.3804	6			
3069-	GRID	1406		135.75	-58.801	17.5199	6			
3070-	GRID	1407		132.57	-56.675	17.6500	6			
3071-	GRID	1408		130.44	-53.491	17.7513	6			
3072-	GRID	1409		129.69	-49.735	17.8080	6			
3073-	GRID	1410		130.44	-45.979	17.8113	6			
3074-	GRID	1411		132.57	-42.794	17.7609	6			
3075-	GRID	1412		135.75	-40.665	17.6647	6			
3076-	GRID	1413		139.50	-39.917	17.5372	6			
3077-	GRID	1414		143.26	-40.663	17.3974	6			
3078-	GRID	1415		146.44	-42.790	17.2673	6			
3079-	GRID	1416		148.56	-45.974	17.1664	6			
3080-	GRID	1451		148.55	-49.873	-4.4217	6			
3081-	GRID	1452		147.86	-53.330	-4.4063	6			
3082-	GRID	1453		145.90	-56.262	-4.4381	6			
3083-	GRID	1454		142.97	-58.221	-4.5123	6			
3084-	GRID	1455		139.52	-58.910	-4.6173	6			
3085-	GRID	1456		136.06	-58.223	-4.7378	6			
3086-	GRID	1457		133.13	-56.266	-4.8548	6			
3087-	GRID	1458		131.18	-53.336	-4.9506	6			
3088-	GRID	1459		130.49	-49.879	-5.0110	6			
3089-	GRID	1460		131.18	-46.422	-5.0264	6			
3090-	GRID	1461		133.13	-43.490	-4.9949	6			
3091-	GRID	1462		136.06	-41.531	-4.9207	6			
3092-	GRID	1463		139.52	-40.442	-4.8154	6			
3093-	GRID	1464		142.97	-41.528	-4.6952	6			
3094-	GRID	1465		145.91	-43.486	-4.5782	6			
3095-	GRID	1466		147.86	-46.416	-4.4821	6			
3096-	GRID	1703		151.10	-76.090	16.8354	6			
3097-	GRID	1704		151.10	-71.940	16.8685	6			
3098-	GRID	1707		151.10	-63.529	16.9357	6			
3099-	GRID	1711		151.10	-58.815	16.9734	6			
3100-	GRID	1714		151.10	-54.478	17.0080	6			

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3101-	GRID	1715		151.10	-49.728	17.0460	6			
3102-	GRID	1717		151.10	-45.010	17.0837	6			
3103-	GRID	1719		151.10	-38.550	17.1353	6			
3104-	GRID	1723		151.10	-33.777	17.1734	6			
3105-	GRID	1726		151.10	-29.141	17.2104	6			
3106-	GRID	1728		151.10	-24.791	17.2452	6			
3107-	GRID	1729		151.10	-21.727	17.2696	6			
3108-	GRID	1753		151.02	-76.796	-4.0460	6			
3109-	GRID	1754		151.02	-71.940	-4.0992	6			
3110-	GRID	1757		151.02	-63.529	-4.1914	6			
3111-	GRID	1761		151.02	-58.815	-4.2431	6			
3112-	GRID	1764		151.02	-54.474	-4.2906	6			
3113-	GRID	1765		151.02	-49.872	-4.3411	6			
3114-	GRID	1767		151.02	-42.970	-4.4167	6			
3115-	GRID	1769		151.02	-38.170	-4.4693	6			
3116-	GRID	1773		151.02	-33.576	-4.5197	6			
3117-	GRID	1776		151.02	-29.275	-4.5668	6			
3118-	GRID	1778		151.02	-24.976	-4.6139	6			
3119-	GRID	1779		151.02	-21.068	-4.6568	6			
3120-	GRID	1803		154.515	-77.856	16.6997				
3121-	GRID	1804		154.515	-73.688	16.7330				
3122-	GRID	1807		154.515	-63.529	16.8142				
3123-	GRID	1811		154.515	-58.815	16.8518				
3124-	GRID	1814		154.515	-54.179	16.8888				
3125-	GRID	1815		154.515	-49.648	16.9250				
3126-	GRID	1819		154.515	-37.751	17.0201				
3127-	GRID	1823		154.515	-32.503	17.0620				
3128-	GRID	1826		154.515	-27.246	17.1040				
3129-	GRID	1828		154.515	-22.528	17.1417				
3130-	GRID	1829		154.515	-19.978	17.1621				
3131-	GRID	1853		154.515	-77.856	-3.9203				
3132-	GRID	1854		154.515	-73.688	-3.9660				
3133-	GRID	1857		154.515	-63.529	-4.0773				
3134-	GRID	1861		154.515	-58.815	-4.1290				
3135-	GRID	1864		154.515	-54.179	-4.1798				
3136-	GRID	1865		154.515	-49.648	-4.2295				
3137-	GRID	1869		154.515	-37.751	-4.3599				
3138-	GRID	1873		154.515	-32.503	-4.417				
3139-	GRID	1876		154.515	-27.246	-4.4750				
3140-	GRID	1878		154.515	-22.528	-4.5267				
3141-	GRID	1879		154.515	-19.978	-4.5547				
3142-	GRID	1903		171.515	-87.975	13.993				
3143-	GRID	1904		171.515	-82.391	14.736				
3144-	GRID	1907		171.515	-67.411	15.903				
3145-	GRID	1911		171.515	-60.058	16.248				
3146-	GRID	1914		171.515	-52.742	16.443				
3147-	GRID	1915		171.515	-45.470	16.469				
3148-	GRID	1919		171.515	-33.775	16.277				
3149-	GRID	1923		171.515	-26.161	15.888				
3150-	GRID	1926		171.515	-17.814	15.294				

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3151-	GRID	1928		171.515	-11.264	14.781				
3152-	GRID	1929		171.515	-8.039	14.519				
3153-	GRID	1953		171.515	-87.975	-3.406				
3154-	GRID	1954		171.515	-82.391	-3.786				
3155-	GRID	1957		171.515	-67.411	-4.505				
3156-	GRID	1961		171.515	-46.058	-4.746				
3157-	GRID	1964		171.515	-32.742	-4.929				
3158-	GRID	1965		171.515	-45.470	-5.032				
3159-	GRID	1969		171.515	-33.775	-5.050				
3160-	GRID	1973		171.515	-26.161	-4.934				
3161-	GRID	1976		171.515	-17.814	-4.771				
3162-	GRID	1978		171.515	-11.264	-4.651				
3163-	GRID	1979		171.515	-8.039	-4.598				
3164-	GRID	2000		188.515	-98.093	11.287		6		
3165-	GRID	2001		188.515	-122.210	3.594		456		
3166-	GRID	2002		188.515	-106.652	9.609		456		
3167-	GRID	2003		188.515	-91.093	12.739		456		
3168-	GRID	2004		188.515	-91.093	12.739				
3169-	GRID	2007		188.515	-71.293	14.987				
3170-	GRID	2011		188.515	-61.301	15.638				
3171-	GRID	2014		188.515	-51.305	15.991				
3172-	GRID	2015		188.515	-41.292	16.007				
3173-	GRID	2019		188.515	-29.799	15.928				
3174-	GRID	2023		188.515	-19.819	14.711				
3175-	GRID	2026		188.515	-8.381	13.483				
3176-	GRID	2028		188.515	0.0	12.423				
3177-	GRID	2029		188.515	3.9	11.876		6		
3178-	GRID	2030		188.515	20.915	9.436		456		
3179-	GRID	2032		188.515	53.985	3.700		456		
3180-	GRID	2050		188.515	-98.093	-2.891		6		
3181-	GRID	2051		188.515	-122.210	1.195		456		
3182-	GRID	2052		188.515	-106.652	-1.206		456		
3183-	GRID	2053		188.515	-91.093	-3.606		456		
3184-	GRID	2054		188.515	-91.093	-3.606				
3185-	GRID	2057		188.515	-71.293	-4.932				
3186-	GRID	2061		188.515	-61.301	-5.364				
3187-	GRID	2064		188.515	-51.305	-5.678				
3188-	GRID	2065		188.515	-41.292	-5.838				
3189-	GRID	2069		188.515	-29.799	-5.741				
3190-	GRID	2073		188.515	-19.819	-5.451				
3191-	GRID	2076		188.515	-8.381	-5.067				
3192-	GRID	2078		188.515	0.0	-4.775				
3193-	GRID	2079		188.515	3.9	-4.641		6		
3194-	GRID	2080		188.515	20.915	-4.509		456		
3195-	GRID	2082		188.515	53.985	-4.022		456		
3196-	GRID	2099		188.515	-91.093	4.698		6		
3197-	GRID	2104		215.515	-88.543	12.178		456		
3198-	GRID	2107		215.515	-70.590	14.893		456		
3199-	GRID	2111		215.515	-60.601	15.512		456		
3200-	GRID	2114		215.515	-50.607	15.863		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3201-	GRID	2115		215.515	-40.595	15.933		456		
3202-	GRID	2119		215.515	-29.101	15.499		456		
3203-	GRID	2123		215.515	-19.119	14.739		456		
3204-	GRID	2126		215.515	-7.680	13.637		456		
3205-	GRID	2128		215.515	0.0	12.375		456		
3206-	GRID	2129		215.515	10.342	11.168		456		
3207-	GRID	2130		215.515	20.684	9.714		456		
3208-	GRID	2132		215.515	53.695	3.657		456		
3209-	GRID	2133		215.515	70.773	0.228		456		
3210-	GRID	2154		215.515	-88.543	-3.830		456		
3211-	GRID	2157		215.515	-70.590	-5.482		456		
3212-	GRID	2161		215.515	-60.601	-5.918		456		
3213-	GRID	2164		215.515	-50.607	-6.158		456		
3214-	GRID	2165		215.515	-40.595	-6.066		456		
3215-	GRID	2169		215.515	-29.101	-5.981		456		
3216-	GRID	2173		215.515	-19.119	-5.967		456		
3217-	GRID	2176		215.515	-7.680	-5.674		456		
3218-	GRID	2178		215.515	0.0	-5.082		456		
3219-	GRID	2179		215.515	10.342	-4.884		456		
3220-	GRID	2180		215.515	20.684	-4.627		456		
3221-	GRID	2182		215.515	53.695	-4.043		456		
3222-	GRID	2183		215.515	70.773	-3.722		456		
3223-	GRID	2201		240.618	-115.800	3.335		456		
3224-	GRID	2202		240.618	-100.987	9.177		456		
3225-	GRID	2203		240.618	-86.173	12.301		456		
3226-	GRID	2204		240.618	-86.173	12.301		456		
3227-	GRID	2207		240.618	-69.936	14.377		456		
3228-	GRID	2211		240.618	-59.951	15.022		456		
3229-	GRID	2214		240.618	-49.958	15.416		456		
3230-	GRID	2215		240.618	-39.946	15.514		456		
3231-	GRID	2219		240.618	-28.452	15.104		456		
3232-	GRID	2223		240.618	-18.469	14.363		456		
3233-	GRID	2226		240.618	-7.029	13.260		456		
3234-	GRID	2228		240.618	0.0	12.379		456		
3235-	GRID	2229		240.618	10.235	11.043		456		
3236-	GRID	2230		240.618	20.470	9.507		456		
3237-	GRID	2232		240.618	53.426	3.616		456		
3238-	GRID	2233		240.618	86.381	-3.275		456		
3239-	GRID	2251		240.618	-115.800	1.030		456		
3240-	GRID	2252		240.618	-100.987	-1.554		456		
3241-	GRID	2253		240.618	-86.173	-4.137		456		
3242-	GRID	2254		240.618	-86.173	-4.137		456		
3243-	GRID	2257		240.618	-69.936	-5.258		456		
3244-	GRID	2261		240.618	-59.951	-5.702		456		
3245-	GRID	2264		240.618	-49.958	-5.947		456		
3246-	GRID	2265		240.618	-39.946	-5.937		456		
3247-	GRID	2269		240.618	-28.452	-5.864		456		
3248-	GRID	2273		240.618	-18.469	-5.779		456		
3249-	GRID	2276		240.618	-7.029	-5.487		456		
3250-	GRID	2278		240.618	0.0	-5.191		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
3251-	GRID	2279		240.618	10.235	-4.964		456		
3252-	GRID	2280		240.618	20.470	-4.736		456		
3253-	GRID	2282		240.618	53.426	-4.006		456		
3254-	GRID	2304		265.215	-83.850	11.974		456		
3255-	GRID	2307		265.215	-69.295	13.867		456		
3256-	GRID	2311		265.215	-59.313	14.544		456		
3257-	GRID	2314		265.215	-49.323	14.960		456		
3258-	GRID	2315		265.215	-39.311	15.081		456		
3259-	GRID	2319		265.215	-27.816	14.704		456		
3260-	GRID	2323		265.215	-17.832	13.994		456		
3261-	GRID	2326		265.215	-6.390	12.890		456		
3262-	GRID	2328		265.215	0.0	12.131		456		
3263-	GRID	2331		240.618	20.470	9.507		456		
3264-	GRID	2332		240.618	53.426	3.616		456		
3265-	GRID	2333		240.618	86.381	-3.275		456		
3266-	GRID	2354		265.215	-83.850	-4.045		456		
3267-	GRID	2357		265.215	-69.295	-5.079		456		
3268-	GRID	2361		265.215	-59.313	-5.530		456		
3269-	GRID	2364		265.215	-49.323	-5.811		456		
3270-	GRID	2365		265.215	-39.311	-5.872		456		
3271-	GRID	2369		265.215	-27.816	-5.810		456		
3272-	GRID	2373		265.215	-17.832	-5.382		456		
3273-	GRID	2376		265.215	-6.390	-4.914		456		
3274-	GRID	2378		265.215	0.0	-5.028		456		
3275-	GRID	2381		240.618	20.470	-4.736		456		
3276-	GRID	2382		240.618	53.426	-4.006		456		
3277-	GRID	2401		288.767	-109.876	3.096		456		
3278-	GRID	2402		288.767	-95.751	8.716		456		
3279-	GRID	2403		288.767	-81.626	11.656		456		
3280-	GRID	2404		288.767	-81.626	11.656		456		
3281-	GRID	2407		288.767	-68.681	13.371		456		
3282-	GRID	2411		288.767	-58.703	14.083		456		
3283-	GRID	2414		288.767	-48.714	14.527		456		
3284-	GRID	2415		288.767	-38.703	14.686		456		
3285-	GRID	2419		288.767	-27.207	14.335		456		
3286-	GRID	2423		288.767	-17.221	13.640		456		
3287-	GRID	2426		288.767	-5.779	12.535		456		
3288-	GRID	2428		288.767	0.0	11.890		456		
3289-	GRID	2429		277.515	10.078	10.702		456		
3290-	GRID	2430		277.515	20.155	9.203		456		
3291-	GRID	2431		277.515	20.155	9.203		456		
3292-	GRID	2432		277.515	51.937	3.568		456		
3293-	GRID	2433		277.515	83.718	-3.092		456		
3294-	GRID	2451		288.767	-109.876	.877		456		
3295-	GRID	2452		288.767	-95.751	-1.534		456		
3296-	GRID	2453		288.767	-81.626	-3.944		456		
3297-	GRID	2454		288.767	-81.626	-3.944		456		
3298-	GRID	2457		288.767	-68.681	-4.868		456		
3299-	GRID	2461		288.767	-58.703	-5.329		456		
3300-	GRID	2464		288.767	-48.714	-5.614		456		

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
3301-	GRID	2465		288.767	-38.703	-5.702		456		
3302-	GRID	2469		288.767	-27.207	-5.651		456		
3303-	GRID	2473		288.767	-17.221	-5.232		456		
3304-	GRID	2476		288.767	-5.779	-4.782		456		
3305-	GRID	2478		288.767	0.0	-4.682		456		
3306-	GRID	2479		277.515	10.078	-4.721		456		
3307-	GRID	2480		277.515	20.155	-4.501		456		
3308-	GRID	2481		277.515	20.155	-4.501		456		
3309-	GRID	2482		277.515	51.937	-3.797		456		
3310-	GRID	2501		288.767	-109.876	3.096		456		
3311-	GRID	2502		288.767	-95.751	8.716		456		
3312-	GRID	2503		288.767	-81.626	11.656		456		
3313-	GRID	2504		314.411	-79.205	11.316		456		
3314-	GRID	2507		314.411	-68.013	12.822		456		
3315-	GRID	2509		314.411	-63.031	13.223		456		
3316-	GRID	2511		314.411	-58.038	13.578		456		
3317-	GRID	2512		314.411	-53.048	13.864		456		
3318-	GRID	2514		314.411	-48.051	14.063		456		
3319-	GRID	2515		314.411	-38.041	14.245		456		
3320-	GRID	2517		314.411	-32.290	14.185		456		
3321-	GRID	2519		314.411	-26.543	13.929		456		
3322-	GRID	2521		314.411	-21.547	13.620		456		
3323-	GRID	2523		314.411	-16.557	13.257		456		
3324-	GRID	2526		314.411	-5.114	12.148		456		
3325-	GRID	2528		314.411	0.0	11.620		456		
3326-	GRID	2529		314.411	9.920	10.360		456		
3327-	GRID	2530		314.411	19.840	8.900		456		
3328-	GRID	2531		314.411	19.840	8.900		456		
3329-	GRID	2532		314.411	50.448	3.500		456		
3330-	GRID	2533		314.411	81.055	-2.908		456		
3331-	GRID	2551		288.767	-109.876	.877		456		
3332-	GRID	2552		288.767	-95.751	-1.534		456		
3333-	GRID	2553		288.767	-81.626	-3.944		456		
3334-	GRID	2554		314.411	-79.205	-3.831		456		
3335-	GRID	2557		314.411	-68.013	-4.654		456		
3336-	GRID	2559		314.411	-63.031	-4.903		456		
3337-	GRID	2561		314.411	-58.038	-5.125		456		
3338-	GRID	2562		314.411	-53.048	-5.313		456		
3339-	GRID	2564		314.411	-48.051	-5.470		456		
3340-	GRID	2565		314.411	-38.041	-5.678		456		
3341-	GRID	2567		314.411	-32.290	-5.710		456		
3342-	GRID	2569		314.411	-26.543	-5.639		456		
3343-	GRID	2571		314.411	-21.547	-5.523		456		
3344-	GRID	2573		314.411	-16.557	-5.377		456		
3345-	GRID	2576		314.411	-5.114	-4.992		456		
3346-	GRID	2578		314.411	0.0	-4.708		456		
3347-	GRID	2579		314.411	9.920	-4.478		456		
3348-	GRID	2580		314.411	19.840	-4.266		456		
3349-	GRID	2581		314.411	19.840	-4.266		456		
3350-	GRID	2582		314.411	50.448	-3.587		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3351-	GRID	2601		338.470	-103.761	2.849		456		
3352-	GRID	2602		338.470	-90.347	8.277		456		
3353-	GRID	2603		338.470	-76.933	10.984		456		
3354-	GRID	2604		338.470	-76.933	10.984		456		
3355-	GRID	2607		338.470	-67.396	12.346		46		
3356-	GRID	2609		338.470	-62.406	12.730		46		
3357-	GRID	2611		338.470	-57.415	13.101		46		
3358-	GRID	2612		338.470	-52.425	13.407		46		
3359-	GRID	2614		338.470	-47.430	13.623		46		
3360-	GRID	2615		338.470	-37.420	13.832		46		
3361-	GRID	2617		338.470	-31.668	13.789		46		
3362-	GRID	2619		338.470	-25.921	13.549		46		
3363-	GRID	2621		338.470	-20.924	13.256		46		
3364-	GRID	2623		338.470	-15.934	12.901		46		
3365-	GRID	2626		338.470	-4.489	11.783		46		
3366-	GRID	2628		338.470	0.0	11.366		456		
3367-	GRID	2631		314.411	19.840	8.900		456		
3368-	GRID	2632		314.411	50.448	3.500		456		
3369-	GRID	2633		314.411	81.055	-2.908		456		
3370-	GRID	2651		338.470	-103.761	.719		456		
3371-	GRID	2652		338.470	-90.347	-1.530		456		
3372-	GRID	2653		338.470	-76.933	-3.779		456		
3373-	GRID	2654		338.470	-76.933	-3.779		456		
3374-	GRID	2657		338.470	-67.386	-4.476		46		
3375-	GRID	2659		338.470	-62.406	-4.710		46		
3376-	GRID	2661		338.470	-57.415	-4.936		46		
3377-	GRID	2662		338.470	-52.425	-5.127		46		
3378-	GRID	2664		338.470	-47.430	-5.287		46		
3379-	GRID	2665		338.470	-37.420	-5.502		46		
3380-	GRID	2667		338.470	-31.668	-5.541		46		
3381-	GRID	2669		338.470	-25.921	-5.475		46		
3382-	GRID	2671		338.470	-20.924	-5.363		46		
3383-	GRID	2673		338.470	-15.934	-5.218		46		
3384-	GRID	2676		338.470	-4.489	-4.827		46		
3385-	GRID	2678		338.470	0.0	-4.579		456		
3386-	GRID	2681		314.411	19.840	-4.266		456		
3387-	GRID	2682		314.411	50.448	-3.587		456		
3388-	GRID	2704		345.471	-76.272	10.891		456		
3389-	GRID	2707		345.471	-67.204	12.179		46		
3390-	GRID	2709		345.471	-62.224	12.585		46		
3391-	GRID	2711		345.471	-57.233	12.961		46		
3392-	GRID	2712		345.471	-52.244	13.273		46		
3393-	GRID	2714		345.471	-47.249	13.494		46		
3394-	GRID	2715		345.471	-37.239	13.711		46		
3395-	GRID	2717		345.471	-31.487	13.673		46		
3396-	GRID	2719		345.471	-25.740	13.438		46		
3397-	GRID	2721		345.471	-20.743	13.150		46		
3398-	GRID	2723		345.471	-15.752	12.797		46		
3399-	GRID	2726		345.471	-4.307	11.676		46		
3400-	GRID	2728		345.471	0.0	11.292		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
3401-	GRID	2729		350.499	9.766	10.084		456		
3402-	GRID	2730		350.499	19.532	8.603		456		
3403-	GRID	2731		350.499	19.532	8.603		456		
3404-	GRID	2732		350.499	48.992	3.433		456		
3405-	GRID	2733		350.499	76.451	-2.729		456		
3406-	GRID	2754		345.471	-76.272	-3.748		456		
3407-	GRID	2757		345.471	-67.204	-4.415		46		
3408-	GRID	2759		345.471	-62.224	-4.654		46		
3409-	GRID	2761		345.471	-57.233	-4.881		46		
3410-	GRID	2762		345.471	-52.244	-5.073		46		
3411-	GRID	2764		345.471	-47.249	-5.234		46		
3412-	GRID	2765		345.471	-37.239	-5.451		46		
3413-	GRID	2767		345.471	-31.487	-5.492		46		
3414-	GRID	2769		345.471	-25.740	-5.428		46		
3415-	GRID	2771		345.471	-20.743	-5.316		46		
3416-	GRID	2773		345.471	-15.752	-5.172		46		
3417-	GRID	2776		345.471	-4.307	-4.780		46		
3418-	GRID	2778		345.471	0.0	-4.535		456		
3419-	GRID	2779		350.499	9.766	-4.296		456		
3420-	GRID	2780		350.499	19.532	-4.076		456		
3421-	GRID	2781		350.499	19.532	-4.076		456		
3422-	GRID	2782		350.499	48.992	-3.403		456		
3423-	GRID	2801		386.587	-97.841	2.609		456		
3424-	GRID	2802		386.587	-85.115	7.828		456		
3425-	GRID	2803		386.587	-72.389	10.348		456		
3426-	GRID	2804		362.529	-74.661	10.664		456		
3427-	GRID	2807		362.529	-66.760	11.772		46		
3428-	GRID	2809		362.529	-61.782	12.232		46		
3429-	GRID	2811		362.529	-56.791	12.621		46		
3430-	GRID	2812		362.529	-51.802	12.946		46		
3431-	GRID	2814		362.529	-46.808	13.181		46		
3432-	GRID	2815		362.529	-36.798	13.417		46		
3433-	GRID	2817		362.529	-31.047	13.391		46		
3434-	GRID	2819		362.529	-25.299	13.168		46		
3435-	GRID	2821		362.529	-20.302	12.891		46		
3436-	GRID	2823		362.529	-15.310	12.545		46		
3437-	GRID	2826		362.529	-3.865	11.417		46		
3438-	GRID	2828		362.529	0.0	11.110		456		
3439-	GRID	2831		386.587	19.223	8.306		456		
3440-	GRID	2832		386.587	47.535	3.367		456		
3441-	GRID	2833		386.587	75.846	-2.549		456		
3442-	GRID	2851		386.587	-97.841	.566		456		
3443-	GRID	2852		386.587	-85.115	-1.525		456		
3444-	GRID	2853		386.587	-72.389	-3.615		456		
3445-	GRID	2854		362.529	-74.661	-3.674		456		
3446-	GRID	2857		362.529	-66.760	-4.265		46		
3447-	GRID	2859		362.529	-61.782	-4.518		46		
3448-	GRID	2861		362.529	-56.791	-4.747		46		
3449-	GRID	2862		362.529	-51.802	-4.943		46		
3450-	GRID	2864		362.529	-46.808	-5.105		46		

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
3451-	GRID	2865		362.529	-36.798	-5.328		46		
3452-	GRID	2867		362.529	-31.047	-5.372		46		
3453-	GRID	2869		362.529	-25.299	-5.312		46		
3454-	GRID	2871		362.529	-20.302	-5.203		46		
3455-	GRID	2873		362.529	-15.310	-5.061		46		
3456-	GRID	2876		362.529	-3.865	-4.664		46		
3457-	GRID	2878		362.529	0.0	-4.427		456		
3458-	GRID	2881		386.587	19.223	-3.885		456		
3459-	GRID	2882		386.587	47.535	-3.217		456		
3460-	GRID	2901		386.587	-97.841	2.609		456		
3461-	GRID	2902		386.587	-85.115	7.828		456		
3462-	GRID	2903		386.587	-72.389	10.348		456		
3463-	GRID	2904		386.587	-72.389	10.348		456		
3464-	GRID	2907		386.587	-66.133	11.189		456		
3465-	GRID	2909		386.587	-61.157	11.725		456		
3466-	GRID	2911		386.587	-56.168	12.138		456		
3467-	GRID	2912		386.587	-51.180	12.481		456		
3468-	GRID	2914		386.587	-46.186	12.735		456		
3469-	GRID	2915		386.587	-36.177	12.998		456		
3470-	GRID	2917		386.587	-30.425	12.992		456		
3471-	GRID	2919		386.587	-24.677	12.790		456		
3472-	GRID	2921		386.587	-19.679	12.527		456		
3473-	GRID	2923		386.587	-14.687	12.191		456		
3474-	GRID	2926		386.587	-3.242	11.203		456		
3475-	GRID	2928		386.587	0.0	10.853		456		
3476-	GRID	2929		386.587	9.612	9.808		456		
3477-	GRID	2930		386.587	19.223	8.306		456		
3478-	GRID	2931		386.587	19.223	8.306		456		
3479-	GRID	2932		386.587	47.535	3.367		456		
3480-	GRID	2933		386.587	75.846	-2.549		456		
3481-	GRID	2951		386.587	-97.841	.566		456		
3482-	GRID	2952		386.587	-85.115	-1.525		456		
3483-	GRID	2953		386.587	-72.389	-3.615		456		
3484-	GRID	2954		386.587	-72.389	-3.615		456		
3485-	GRID	2957		386.587	-66.133	-4.041		456		
3486-	GRID	2959		386.587	-61.157	-4.323		456		
3487-	GRID	2961		386.587	-56.168	-4.557		456		
3488-	GRID	2962		386.587	-51.180	-4.757		456		
3489-	GRID	2964		386.587	-46.186	-4.921		456		
3490-	GRID	2965		386.587	-36.177	-5.157		456		
3491-	GRID	2967		386.587	-30.425	-5.195		456		
3492-	GRID	2969		386.587	-24.677	-5.141		456		
3493-	GRID	2971		386.587	-19.679	-5.047		456		
3494-	GRID	2973		386.587	-14.687	-4.925		456		
3495-	GRID	2976		386.587	-3.242	-4.471		456		
3496-	GRID	2978		386.587	0.0	-4.340		456		
3497-	GRID	2979		386.587	9.612	-4.213		456		
3498-	GRID	2980		386.587	19.223	-3.885		456		
3499-	GRID	2981		386.587	19.223	-3.885		456		
3500-	GRID	2982		386.587	47.535	-3.217		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3501-	GRID	3001		410.784	-54.864	2.489	456			
3502-	GRID	3002		410.784	-82.485	7.508	456			
3503-	GRID	3003		410.780	-70.106	10.002	456			
3504-	GRID	3004		410.780	-70.106	10.002	456			
3505-	GRID	3007		410.780	-65.497	10.749	456			
3506-	GRID	3011		410.780	-55.537	11.647	456			
3507-	GRID	3014		410.780	-45.557	12.283	456			
3508-	GRID	3015		410.780	-35.551	12.575	456			
3509-	GRID	3019		410.780	-24.052	12.410	456			
3510-	GRID	3023		410.780	-14.061	11.833	456			
3511-	GRID	3026		410.780	-2.614	11.198	456			
3512-	GRID	3028		410.780	0.0	10.594	456			
3513-	GRID	3029		422.360	9.459	9.467	456			
3514-	GRID	3030		422.360	18.918	8.012	456			
3515-	GRID	3031		422.360	18.918	8.012	456			
3516-	GRID	3032		422.360	46.091	3.301	456			
3517-	GRID	3033		422.360	73.264	-2.371	456			
3518-	GRID	3051		410.784	-54.864	.490	456			
3519-	GRID	3052		410.784	-82.485	-1.511	456			
3520-	GRID	3053		410.780	-70.106	-3.512	456			
3521-	GRID	3054		410.780	-70.106	-3.512	456			
3522-	GRID	3057		410.780	-65.497	-3.942	456			
3523-	GRID	3061		410.780	-55.537	-4.367	456			
3524-	GRID	3064		410.780	-45.557	-4.738	456			
3525-	GRID	3065		410.780	-35.551	-4.974	456			
3526-	GRID	3069		410.780	-24.052	-4.981	456			
3527-	GRID	3073		410.780	-14.061	-4.742	456			
3528-	GRID	3076		410.780	-2.614	-4.308	456			
3529-	GRID	3078		410.780	0.0	-4.209	456			
3530-	GRID	3079		422.360	9.459	-3.853	456			
3531-	GRID	3080		422.360	18.918	-3.632	456			
3532-	GRID	3081		422.360	18.918	-3.632	456			
3533-	GRID	3082		422.360	46.091	-3.002	456			
3534-	GRID	3101		434.981	-91.887	2.369	456			
3535-	GRID	3102		434.981	-79.854	7.249	456			
3536-	GRID	3103		434.980	-67.821	9.682	456			
3537-	GRID	3104		434.980	-67.821	9.682	456			
3538-	GRID	3107		434.980	-54.860	10.559	456			
3539-	GRID	3111		434.980	-54.906	11.154	456			
3540-	GRID	3114		434.980	-44.928	11.830	456			
3541-	GRID	3115		434.980	-34.925	12.161	456			
3542-	GRID	3119		434.980	-23.427	12.032	456			
3543-	GRID	3123		434.980	-13.434	11.478	456			
3544-	GRID	3128		434.980	0.0	10.331	456			
3545-	GRID	3131		458.132	18.612	7.718	456			
3546-	GRID	3132		458.132	44.647	3.235	456			
3547-	GRID	3133		458.132	70.682	-2.194	456			
3548-	GRID	3151		434.981	-91.887	.413	456			
3549-	GRID	3152		434.981	-79.854	-1.495	456			
3550-	GRID	3153		434.980	-67.821	-3.403	456			

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
3551-	GRID	3154		434.980	-67.821	-3.403		456		
3552-	GRID	3157		434.980	-64.860	-3.582		456		
3553-	GRID	3161		434.980	-54.906	-4.185		456		
3554-	GRID	3164		434.980	-44.928	-4.522		456		
3555-	GRID	3165		434.980	-34.925	-4.660		456		
3556-	GRID	3169		434.980	-23.427	-4.678		456		
3557-	GRID	3173		434.980	-13.434	-4.362		456		
3558-	GRID	3178		434.980	0.0	-3.866		456		
3559-	GRID	3181		458.132	18.612	-3.379		456		
3560-	GRID	3182		458.132	44.647	-2.787		456		
3561-	GRID	3201		458.132	-89.039	2.253		456		
3562-	GRID	3202		458.132	-77.337	7.024		456		
3563-	GRID	3203		458.130	-65.635	9.371		456		
3564-	GRID	3204		458.130	-65.635	9.371		456		
3565-	GRID	3211		458.130	-54.302	10.677		456		
3566-	GRID	3214		458.130	-44.327	11.394		456		
3567-	GRID	3215		458.130	-34.326	11.765		456		
3568-	GRID	3219		458.130	-22.829	11.670		456		
3569-	GRID	3223		458.130	-12.835	11.141		456		
3570-	GRID	3228		458.130	0.0	10.083		456		
3571-	GRID	3229		458.132	9.307	9.125		456		
3572-	GRID	3230		458.132	18.612	7.718		456		
3573-	GRID	3231		458.132	18.612	7.718		456		
3574-	GRID	3232		458.132	44.647	3.235		456		
3575-	GRID	3233		458.132	70.682	-2.194		456		
3576-	GRID	3251		458.132	-89.039	.339		456		
3577-	GRID	3252		458.132	-77.337	-1.479		456		
3578-	GRID	3253		458.130	-65.635	-3.296		456		
3579-	GRID	3254		458.130	-65.635	-3.296		456		
3580-	GRID	3261		458.130	-54.302	-3.988		456		
3581-	GRID	3264		458.130	-44.327	-4.330		456		
3582-	GRID	3265		458.130	-34.326	-4.470		456		
3583-	GRID	3269		458.130	-22.829	-4.498		456		
3584-	GRID	3273		458.130	-12.835	-4.191		456		
3585-	GRID	3278		458.130	0.0	-3.804		456		
3586-	GRID	3279		458.132	9.307	-3.592		456		
3587-	GRID	3280		458.132	18.612	-3.379		456		
3588-	GRID	3281		458.132	18.612	-3.379		456		
3589-	GRID	3282		458.132	44.647	-2.787		456		
3590-	GRID	3301		458.132	-89.039	2.253		456		
3591-	GRID	3302		458.132	-77.337	7.024		456		
3592-	GRID	3303		458.130	-65.635	9.371		456		
3593-	GRID	3304		482.790	-63.306	9.034		456		
3594-	GRID	3311		482.790	-53.658	10.160		456		
3595-	GRID	3314		482.790	-43.686	10.926		456		
3596-	GRID	3315		482.790	-33.688	11.339		456		
3597-	GRID	3319		482.790	-22.192	11.282		456		
3598-	GRID	3323		482.790	-12.197	10.778		456		
3599-	GRID	3328		482.790	0.0	9.815		456		
3600-	GRID	3329		494.080	9.153	8.784		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3601-	GRID	3330		494.080	18.306	7.422		456		
3602-	GRID	3331		494.080	18.306	7.422		456		
3603-	GRID	3332		494.080	43.197	3.169		456		
3604-	GRID	3333		494.080	68.088	-2.015		456		
3605-	GRID	3351		458.132	-89.039	.339		456		
3606-	GRID	3352		458.132	-77.337	-1.479		456		
3607-	GRID	3353		458.130	-65.635	-3.296		456		
3608-	GRID	3354		482.790	-63.306	-3.190		456		
3609-	GRID	3361		482.790	-53.658	-3.809		456		
3610-	GRID	3364		482.790	-43.686	-4.202		456		
3611-	GRID	3365		482.790	-33.688	-4.455		456		
3612-	GRID	3369		482.790	-22.192	-4.494		456		
3613-	GRID	3373		482.790	-12.197	-4.274		456		
3614-	GRID	3378		482.790	0.0	-3.777		456		
3615-	GRID	3379		494.080	9.153	-3.424		456		
3616-	GRID	3380		494.080	18.306	-3.203		456		
3617-	GRID	3381		494.080	18.306	-3.203		456		
3618-	GRID	3382		494.080	43.197	-2.609		456		
3619-	GRID	3401		506.409	-83.099	2.013		456		
3620-	GRID	3402		506.409	-72.088	6.687		456		
3621-	GRID	3403		506.410	-61.076	8.685		456		
3622-	GRID	3404		506.410	-61.076	8.685		456		
3623-	GRID	3411		506.410	-53.042	9.741		456		
3624-	GRID	3414		506.410	-43.073	10.467		456		
3625-	GRID	3415		506.410	-33.077	10.922		456		
3626-	GRID	3419		506.410	-21.581	10.904		456		
3627-	GRID	3423		506.410	-11.585	10.427		456		
3628-	GRID	3428		506.410	0.0	9.557		456		
3629-	GRID	3431		530.027	17.999	7.127		456		
3630-	GRID	3432		530.027	41.746	3.103		456		
3631-	GRID	3433		530.027	65.493	-1.836		456		
3632-	GRID	3451		506.409	-83.099	.186		456		
3633-	GRID	3452		506.409	-72.088	-1.459		456		
3634-	GRID	3453		506.410	-61.076	-3.103		456		
3635-	GRID	3454		506.410	-61.076	-3.103		456		
3636-	GRID	3461		506.410	-53.042	-3.640		456		
3637-	GRID	3464		506.410	-43.073	-4.020		456		
3638-	GRID	3465		506.410	-33.077	-4.278		456		
3639-	GRID	3469		506.410	-21.581	-4.327		456		
3640-	GRID	3473		506.410	-11.585	-4.113		456		
3641-	GRID	3478		506.410	0.0	-3.634		456		
3642-	GRID	3481		530.027	17.999	-3.028		456		
3643-	GRID	3482		530.027	41.746	-2.432		456		
3644-	GRID	3501		553.164	-77.347	1.781		456		
3645-	GRID	3502		553.164	-67.011	6.152		456		
3646-	GRID	3503		553.030	-56.674	8.037		456		
3647-	GRID	3504		530.030	-58.846	8.365		456		
3648-	GRID	3511		530.030	-52.426	9.209		456		
3649-	GRID	3514		530.030	-42.459	10.018		456		
3650-	GRID	3515		530.030	-32.467	10.519		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3651-	GRID	3519		530.030	-20.971	10.539		456		
3652-	GRID	3523		530.030	-10.973	10.088		456		
3653-	GRID	3528		530.030	0.0	9.300		456		
3654-	GRID	3529		530.027	9.000	8.442		456		
3655-	GRID	3530		530.027	17.999	7.127		456		
3656-	GRID	3531		530.027	17.999	7.127		456		
3657-	GRID	3532		530.027	41.746	3.103		456		
3658-	GRID	3533		530.027	65.493	-1.836		456		
3659-	GRID	3551		553.164	-77.347	.038		456		
3660-	GRID	3552		553.164	-67.011	-1.444		456		
3661-	GRID	3553		553.030	-56.674	-2.912		456		
3662-	GRID	3554		530.030	-58.846	-3.016		456		
3663-	GRID	3561		530.030	-52.426	-3.444		456		
3664-	GRID	3564		530.030	-42.459	-3.837		456		
3665-	GRID	3565		530.030	-32.467	-4.100		456		
3666-	GRID	3569		530.030	-20.971	-4.159		456		
3667-	GRID	3573		530.030	-10.973	-3.953		456		
3668-	GRID	3578		530.030	0.0	-3.482		456		
3669-	GRID	3579		530.027	9.000	-3.255		456		
3670-	GRID	3580		530.027	17.999	-3.028		456		
3671-	GRID	3581		530.027	17.999	-3.028		456		
3672-	GRID	3582		530.027	41.746	-2.432		456		
3673-	GRID	3601		553.164	-77.347	1.781		456		
3674-	GRID	3602		553.164	-67.011	6.152		456		
3675-	GRID	3603		553.030	-56.674	8.037		456		
3676-	GRID	3604		553.030	-56.674	8.037		456		
3677-	GRID	3611		553.030	-51.826	8.814		456		
3678-	GRID	3614		553.030	-41.862	9.584		456		
3679-	GRID	3615		553.030	-31.872	10.123		456		
3680-	GRID	3619		553.030	-20.377	10.182		456		
3681-	GRID	3623		553.030	-10.378	9.761		456		
3682-	GRID	3628		553.030	0.0	9.045		456		
3683-	GRID	3629		564.732	8.851	8.104		456		
3684-	GRID	3630		564.732	17.703	6.841		456		
3685-	GRID	3631		564.732	17.703	6.841		456		
3686-	GRID	3632		564.732	40.346	3.039		456		
3687-	GRID	3633		564.732	62.988	-1.663		456		
3688-	GRID	3651		553.164	-77.347	.038		456		
3689-	GRID	3652		553.164	-67.011	-1.444		456		
3690-	GRID	3653		553.030	-56.674	-2.912		456		
3691-	GRID	3654		553.030	-56.674	-2.912		456		
3692-	GRID	3661		553.030	-51.826	-3.244		456		
3693-	GRID	3664		553.030	-41.862	-3.664		456		
3694-	GRID	3665		553.030	-31.872	-3.931		456		
3695-	GRID	3669		553.030	-20.377	-4.000		456		
3696-	GRID	3673		553.030	-10.378	-3.800		456		
3697-	GRID	3678		553.030	0.0	-3.356		456		
3698-	GRID	3679		564.732	8.851	-3.038		456		
3699-	GRID	3680		564.732	17.703	-2.812		456		
3700-	GRID	3681		564.732	17.703	-2.812		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3701-	GRID	3682		564.732	40.346	-2.238		456		
3702-	GRID	3701		576.301	-74.501	1.666		456		
3703-	GRID	3702		576.301	-64.489	5.781		456		
3704-	GRID	3703		576.300	-54.477	7.690		456		
3705-	GRID	3704		576.300	-54.477	7.690		456		
3706-	GRID	3711		576.300	-51.218	8.506		456		
3707-	GRID	3714		576.300	-41.257	9.124		456		
3708-	GRID	3715		576.300	-31.270	9.717		456		
3709-	GRID	3719		576.300	-19.776	9.820		456		
3710-	GRID	3723		576.300	-9.775	9.426		456		
3711-	GRID	3728		576.300	0.0	8.776		456		
3712-	GRID	3731		599.437	17.406	6.556		456		
3713-	GRID	3732		599.437	38.945	2.975		456		
3714-	GRID	3733		599.437	60.484	-1.491		456		
3715-	GRID	3751		576.301	-74.501	-.036		456		
3716-	GRID	3752		576.301	-64.489	-1.441		456		
3717-	GRID	3753		576.300	-54.477	-2.846		456		
3718-	GRID	3754		576.300	-54.477	-2.846		456		
3719-	GRID	3761		576.300	-51.218	-3.183		456		
3720-	GRID	3764		576.300	-41.257	-3.477		456		
3721-	GRID	3765		576.300	-31.270	-3.748		456		
3722-	GRID	3769		576.300	-19.776	-3.825		456		
3723-	GRID	3773		576.300	-9.775	-3.632		456		
3724-	GRID	3778		576.300	0.0	-3.213		456		
3725-	GRID	3781		599.437	17.406	-2.596		456		
3726-	GRID	3782		599.437	38.945	-2.044		456		
3727-	GRID	3801		599.437	-71.654	1.551		456		
3728-	GRID	3802		599.437	-61.973	5.495		456		
3729-	GRID	3803		599.440	-52.292	7.371		456		
3730-	GRID	3804		599.440	-52.292	7.371		456		
3731-	GRID	3814		599.440	-40.656	8.663		456		
3732-	GRID	3815		599.440	-30.671	9.303		456		
3733-	GRID	3819		599.440	-19.178	9.450		456		
3734-	GRID	3823		599.440	-9.176	9.088		456		
3735-	GRID	3828		599.440	0.0	8.524		456		
3736-	GRID	3829		599.437	8.703	7.766		456		
3737-	GRID	3830		599.437	17.406	6.556		456		
3738-	GRID	3831		599.437	17.406	6.556		456		
3739-	GRID	3832		599.437	38.945	2.975		456		
3740-	GRID	3833		599.437	60.484	-1.491		456		
3741-	GRID	3851		599.437	-71.654	-.109		456		
3742-	GRID	3852		599.437	-61.973	-1.422		456		
3743-	GRID	3853		599.440	-52.292	-2.734		456		
3744-	GRID	3854		599.440	-52.292	-2.734		456		
3745-	GRID	3864		599.440	-40.656	-3.283		456		
3746-	GRID	3865		599.440	-30.671	-3.486		456		
3747-	GRID	3869		599.440	-19.178	-3.571		456		
3748-	GRID	3873		599.440	-9.176	-3.478		456		
3749-	GRID	3878		599.440	0.0	-3.044		456		
3750-	GRID	3879		599.437	8.703	-2.820		456		

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
3751-	GRID	3880		599.437	17.406	-2.596		456		
3752-	GRID	3881		599.437	17.406	-2.596		456		
3753-	GRID	3882		599.437	38.945	-2.044		456		
3754-	GRID	3901		620.913	-69.012	1.444		456		
3755-	GRID	3902		620.913	-59.638	5.323		456		
3756-	GRID	3903		620.913	-50.264	7.075		456		
3757-	GRID	3904		620.913	-50.264	7.075		456		
3758-	GRID	3914		620.913	-40.098	8.229		456		
3759-	GRID	3915		620.913	-30.116	8.921		456		
3760-	GRID	3919		620.913	-18.623	9.102		456		
3761-	GRID	3923		620.913	-8.620	8.852		456		
3762-	GRID	3928		620.913	0.0	8.279		456		
3763-	GRID	3929		633.219	8.559	7.435		456		
3764-	GRID	3930		633.219	17.118	6.278		456		
3765-	GRID	3931		633.219	17.118	6.278		456		
3766-	GRID	3932		633.219	37.582	2.913		456		
3767-	GRID	3933		633.219	58.045	-1.323		456		
3768-	GRID	3951		620.913	-69.012	-.177		456		
3769-	GRID	3952		620.913	-59.638	-1.410		456		
3770-	GRID	3953		620.913	-50.264	-2.637		456		
3771-	GRID	3954		620.913	-50.264	-2.637		456		
3772-	GRID	3964		620.913	-40.098	-3.105		456		
3773-	GRID	3965		620.913	-30.116	-3.313		456		
3774-	GRID	3969		620.913	-18.623	-3.404		456		
3775-	GRID	3973		620.913	-8.620	-3.313		456		
3776-	GRID	3978		620.913	0.0	-3.005		456		
3777-	GRID	3979		633.219	8.559	-2.680		456		
3778-	GRID	3980		633.219	17.118	-2.413		456		
3779-	GRID	3981		633.219	17.118	-2.413		456		
3780-	GRID	3982		633.219	37.582	-1.868		456		
3781-	GRID	4001		620.913	-69.012	1.444		456		
3782-	GRID	4002		620.913	-59.638	5.323		456		
3783-	GRID	4003		620.913	-50.264	7.075		456		
3784-	GRID	4004		644.480	-48.039	6.732		456		
3785-	GRID	4014		644.480	-39.486	7.819		456		
3786-	GRID	4015		644.480	-29.506	8.489		456		
3787-	GRID	4019		644.480	-18.014	8.721		456		
3788-	GRID	4023		644.480	-8.010	8.487		456		
3789-	GRID	4028		644.480	0.0	8.008		456		
3790-	GRID	4031		667.000	16.829	6.000		456		
3791-	GRID	4032		667.000	36.218	2.850		456		
3792-	GRID	4033		667.000	55.607	-1.155		456		
3793-	GRID	4051		620.913	-69.012	-.177		456		
3794-	GRID	4052		620.913	-59.638	-1.410		456		
3795-	GRID	4053		620.913	-50.264	-2.637		456		
3796-	GRID	4054		644.480	-48.039	-2.563		456		
3797-	GRID	4064		644.480	-39.486	-2.967		456		
3798-	GRID	4065		644.480	-29.506	-3.214		456		
3799-	GRID	4069		644.480	-18.014	-3.309		456		
3800-	GRID	4073		644.480	-8.010	-3.159		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
3801-	GRID	4078		644.480	0.0	-2.847		456		
3802-	GRID	4081		667.000	16.829	-2.230		456		
3803-	GRID	4082		667.000	36.218	-1.693		456		
3804-	GRID	4101		667.000	-63.342	1.215		456		
3805-	GRID	4102		667.000	-54.627	4.767		456		
3806-	GRID	4103		667.000	-45.912	6.418		456		
3807-	GRID	4104		667.000	-45.912	6.418		456		
3808-	GRID	4114		667.000	-38.901	7.315		456		
3809-	GRID	4115		667.000	-28.923	8.078		456		
3810-	GRID	4119		667.000	-17.433	8.362		456		
3811-	GRID	4123		667.000	-7.427	8.151		456		
3812-	GRID	4128		667.000	0.0	7.745		456		
3813-	GRID	4129		667.000	8.415	7.104		456		
3814-	GRID	4130		667.000	16.829	6.000		456		
3815-	GRID	4132		667.000	36.218	2.850		456		
3816-	GRID	4133		667.000	55.607	-1.155		456		
3817-	GRID	4151		667.000	-63.342	-.324		456		
3818-	GRID	4152		667.000	-54.627	-1.389		456		
3819-	GRID	4153		667.000	-45.912	-2.453		456		
3820-	GRID	4154		667.000	-45.912	-2.453		456		
3821-	GRID	4164		667.000	-38.901	-2.765		456		
3822-	GRID	4165		667.000	-28.923	-3.024		456		
3823-	GRID	4169		667.000	-17.433	-3.123		456		
3824-	GRID	4173		667.000	-7.427	-2.978		456		
3825-	GRID	4178		667.000	0.0	-2.698		456		
3826-	GRID	4179		667.000	8.415	-2.539		456		
3827-	GRID	4180		667.000	16.829	-2.230		456		
3828-	GRID	4182		667.000	36.218	-1.693		456		
3829-	GRID	4201		711.000	-57.929	.996		456		
3830-	GRID	4202		711.000	-49.843	4.325		456		
3831-	GRID	4203		711.000	-41.757	5.805		456		
3832-	GRID	4204		689.000	-43.835	6.115		456		
3833-	GRID	4214		689.000	-38.329	6.907		456		
3834-	GRID	4215		689.000	-28.355	7.672		456		
3835-	GRID	4219		689.000	-16.864	8.022		456		
3836-	GRID	4223		689.000	-6.857	7.814		456		
3837-	GRID	4228		689.000	0.0	7.479		456		
3838-	GRID	4229		689.000	8.321	6.749		456		
3839-	GRID	4230		689.000	16.641	5.819		456		
3840-	GRID	4232		689.000	35.330	2.908		456		
3841-	GRID	4233		689.000	54.019	-1.003		456		
3842-	GRID	4251		711.000	-57.929	-.464		456		
3843-	GRID	4252		711.000	-49.843	-1.370		456		
3844-	GRID	4253		711.000	-41.757	-2.276		456		
3845-	GRID	4254		689.000	-43.835	-2.350		456		
3846-	GRID	4264		689.000	-38.329	-2.568		456		
3847-	GRID	4265		689.000	-28.355	-2.846		456		
3848-	GRID	4269		689.000	-16.864	-2.946		456		
3849-	GRID	4273		689.000	-6.857	-2.803		456		
3850-	GRID	4278		689.000	0.0	-2.530		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3851-	GRID	4279		689.000	8.321	-2.292		456		
3852-	GRID	4280		689.000	16.641	-2.053		456		
3853-	GRID	4282		689.000	33.330	-1.528		456		
3854-	GRID	4301		711.000	-57.929	.996		456		
3855-	GRID	4302		711.000	-49.843	4.325		456		
3856-	GRID	4303		711.000	-41.757	5.805		456		
3857-	GRID	4304		711.000	-41.757	5.805		456		
3858-	GRID	4314		711.000	-37.758	6.623		456		
3859-	GRID	4315		711.000	-27.785	7.285		456		
3860-	GRID	4319		711.000	-16.296	7.686		456		
3861-	GRID	4323		711.000	-6.288	7.518		456		
3862-	GRID	4328		711.000	0.0	7.210		456		
3863-	GRID	4329		711.000	8.227	6.524		456		
3864-	GRID	4330		711.000	16.453	5.638		456		
3865-	GRID	4332		711.000	34.442	2.843		456		
3866-	GRID	4333		711.000	52.431	-0.852		456		
3867-	GRID	4351		711.000	-57.929	-.464		456		
3868-	GRID	4352		711.000	-49.843	-1.370		456		
3869-	GRID	4353		711.000	-41.757	-2.276		456		
3870-	GRID	4354		711.000	-41.757	-2.276		456		
3871-	GRID	4364		711.000	-37.758	-2.583		456		
3872-	GRID	4365		711.000	-27.785	-2.656		456		
3873-	GRID	4369		711.000	-16.296	-2.757		456		
3874-	GRID	4373		711.000	-6.288	-2.614		456		
3875-	GRID	4378		711.000	0.0	-2.448		456		
3876-	GRID	4379		711.000	8.227	-2.163		456		
3877-	GRID	4380		711.000	16.453	-1.877		456		
3878-	GRID	4382		711.000	34.442	-1.365		456		
3879-	GRID	4401		733.000	-55.222	.886		456		
3880-	GRID	4402		733.000	-47.451	4.068		456		
3881-	GRID	4403		733.000	-39.680	5.486		456		
3882-	GRID	4404		733.000	-39.680	5.486		456		
3883-	GRID	4415		733.000	-27.216	6.897		456		
3884-	GRID	4419		733.000	-15.727	7.348		456		
3885-	GRID	4423		733.000	-5.718	7.220		456		
3886-	GRID	4428		733.000	0.0	6.937		456		
3887-	GRID	4429		733.000	8.133	6.297		456		
3888-	GRID	4430		733.000	16.265	5.457		456		
3889-	GRID	4432		733.000	33.554	2.779		456		
3890-	GRID	4433		733.000	50.843	-0.700		456		
3891-	GRID	4451		733.000	-55.222	-.533		456		
3892-	GRID	4452		733.000	-47.451	-1.351		456		
3893-	GRID	4453		733.000	-39.680	-2.169		456		
3894-	GRID	4454		733.000	-39.680	-2.169		456		
3895-	GRID	4465		733.000	-27.216	-2.471		456		
3896-	GRID	4469		733.000	-15.727	-2.570		456		
3897-	GRID	4473		733.000	-5.718	-2.427		456		
3898-	GRID	4478		733.000	0.0	-2.307		456		
3899-	GRID	4479		733.000	8.133	-2.004		456		
3900-	GRID	4480		733.000	16.265	-1.700		456		

SORTED BULK DATA ECHO

CARD COUNT	. 1	.. 2	.. 3	.. 4	.. 5	.. 6	.. 7	.. 8	.. 9	.. 10 .
3901-	GRID	4482		733.000	33.554	-1.200		456		
3902-	GRID	4501		755.000	-52.515	.777		456		
3903-	GRID	4502		755.000	-45.059	3.808		456		
3904-	GRID	4503		755.000	-37.603	5.189		456		
3905-	GRID	4504		755.000	-37.603	5.189		456		
3906-	GRID	4515		755.000	-26.647	6.547		456		
3907-	GRID	4519		755.000	-15.159	7.074		456		
3908-	GRID	4523		755.000	-5.148	6.954		456		
3909-	GRID	4528		755.000	0.0	6.659		456		
3910-	GRID	4529		755.000	8.039	6.068		456		
3911-	GRID	4530		755.000	16.078	5.276		456		
3912-	GRID	4532		755.000	32.667	2.714		456		
3913-	GRID	4533		755.000	45.256	-0.549		456		
3914-	GRID	4551		755.000	-52.515	-.603		456		
3915-	GRID	4552		755.000	-45.059	-1.337		456		
3916-	GRID	4553		755.000	-37.603	-2.071		456		
3917-	GRID	4554		755.000	-37.603	-2.071		456		
3918-	GRID	4565		755.000	-26.647	-2.322		456		
3919-	GRID	4569		755.000	-15.159	-2.418		456		
3920-	GRID	4573		755.000	-5.148	-2.414		456		
3921-	GRID	4578		755.000	0.0	-2.104		456		
3922-	GRID	4579		755.000	8.039	-1.814		456		
3923-	GRID	4580		755.000	16.078	-1.524		456		
3924-	GRID	4582		755.000	32.667	-1.037		456		
3925-	GRID	4601		777.000	-49.809	.668		456		
3926-	GRID	4602		777.000	-42.667	3.597		456		
3927-	GRID	4603		777.000	-35.525	4.870		456		
3928-	GRID	4604		777.000	-35.525	4.870		456		
3929-	GRID	4611		777.000	-49.809	.668		456		
3930-	GRID	4612		777.000	-42.667	3.597		456		
3931-	GRID	4615		777.000	-26.078	6.124		456		
3932-	GRID	4619		777.000	-14.591	6.714		456		
3933-	GRID	4623		777.000	-4.579	6.637		456		
3934-	GRID	4628		777.000	0.0	6.393		456		
3935-	GRID	4629		777.000	7.945	5.844		456		
3936-	GRID	4630		777.000	15.890	5.095		456		
3937-	GRID	4632		777.000	31.779	2.649		456		
3938-	GRID	4633		777.000	47.668	-0.397		456		
3939-	GRID	4651		777.000	-49.809	-.673		456		
3940-	GRID	4652		777.000	-42.667	-1.300		456		
3941-	GRID	4653		777.000	-35.525	-1.927		456		
3942-	GRID	4654		777.000	-35.525	-1.927		456		
3943-	GRID	4661		777.000	-49.809	-.673		456		
3944-	GRID	4662		777.000	-42.667	-1.300		456		
3945-	GRID	4665		777.000	-26.078	-2.226		456		
3946-	GRID	4669		777.000	-14.591	-2.318		456		
3947-	GRID	4673		777.000	-4.579	-2.134		456		
3948-	GRID	4678		777.000	0.0	-1.966		456		
3949-	GRID	4679		777.000	7.945	-1.657		456		
3950-	GRID	4680		777.000	15.890	-1.347		456		

SORTED BULK DATA ECHO

CARD COUNT	1	2	3	4	5	6	7	8	9	10
3951-	GRID	4682		777.000	31.779	-0.872		456		
3952-	GRID	4701		797.716	-47.260	.596		456		
3953-	GRID	4702		798.688	-40.323	3.412		456		
3954-	GRID	4704		799.660	-33.385	4.574		456		
3955-	GRID	4715		800.771	-25.464	5.685		456		
3956-	GRID	4719		802.389	-13.935	6.313		456		
3957-	GRID	4723		803.796	-3.885	6.264		456		
3958-	GRID	4728		804.340	0.0	6.145		456		
3959-	GRID	4729		805.435	7.619	5.619		456		
3960-	GRID	4730		806.531	15.638	4.893		456		
3961-	GRID	4732		808.605	30.438	2.614		456		
3962-	GRID	4733		810.679	45.237	-0.165		456		
3963-	GRID	4751		797.716	-47.260	-0.719		456		
3964-	GRID	4752		798.688	-40.323	-1.280		456		
3965-	GRID	4754		799.660	-33.385	-1.841		456		
3966-	GRID	4765		800.771	-25.464	-1.910		456		
3967-	GRID	4769		802.389	-13.935	-1.983		456		
3968-	GRID	4773		803.796	-3.885	-1.848		456		
3969-	GRID	4778		804.340	0.0	-1.831		456		
3970-	GRID	4779		805.435	7.619	-1.491		456		
3971-	GRID	4780		806.531	15.638	-1.150		456		
3972-	GRID	4782		808.605	30.438	-0.640		456		
3973-	GRID	4804		824.259	-31.066	0.0		456		
3974-	GRID	4815		825.092	-24.835	0.0		456		
3975-	GRID	4819		826.708	-13.306	0.0		456		
3976-	GRID	4823		828.117	-3.255	0.0		456		
3977-	GRID	4828		828.573	0.0	0.0		456		
3978-	GRID	4829		829.655	7.716	0.0		456		
3979-	GRID	4830		830.736	15.431	0.0		456		
3980-	GRID	4832		832.704	29.469	0.0		456		
3981-	GRID	4833		834.671	43.506	0.0		456		
3982-	MAT1	1	10.5+6	4.0+6	.33	.100				
3983-	MAT1	2	16.2+6	6.4+6	.33	.160				
3984-	MAT1	3	30.+6	12.+6	.33	.300				
3985-	MAT1	4	3.6+6	1.4+6	.14	.075				
3986-	PBAR	1500	1	.500	.10					
3987-	PBAR	1555	1	.555	.10					
3988-	PBAR	1563	1	.563	.10					
3989-	PBAR	1575	1	.575	.10					
3990-	PBAR	1583	1	.583	.10					
3991-	PBAR	1822	1	.822	.10					
3992-	PBAR	1832	1	.832	.10					
3993-	PBAR	1862	1	.862	.10					
3994-	PBAR	11235	1	1.235	.10					
3995-	PBAR	11261	1	1.261	.10					
3996-	PBAR	11512	1	1.512	.10					
3997-	PBAR	11624	1	1.624	.10					
3998-	PBAR	11853	1	1.853	.10					
3999-	PBAR	11892	1	1.892	.10					
4000-	PBAR	12446	1	2.446	.10					

SORTED BULK DATA ECHO

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CARD
COUNT      .   1  ..   2  ..   3  ..   4  ..   5  ..   6  ..   7  ..   8  ..   9  ..  10  .
4001-      PBAR    12511   1       2.511   .10
4002-      PBAR    21000   2       8.00    1.00    1.00
4003-      PELAS   1       1.0+6
4004-      PELAS   12      2.0+5
4005-      PELAS   13      2.5+4
4006-      PELAS   14      1.0+5
4007-      PELAS   123     2.5+4
4008-      PQDMEM2 1040    1       .040
4009-      PQDMEM2 1050    1       .050
4010-      PQDMEM2 1055    1       .055
4011-      PQDMEM2 1060    1       .060
4012-      PQDMEM2 1065    1       .065
4013-      PQDMEM2 1070    1       .070
4014-      PQDMEM2 1090    1       .090
4015-      PQDMEM2 1098    1       .098
4016-      PQDMEM2 1113    1       .113
4017-      PQDMEM2 1121    1       .121
4018-      PQDMEM2 1125    1       .125
4019-      PQDMEM2 1127    1       .127
4020-      PQDMEM2 1133    1       .133
4021-      PQDMEM2 1136    1       .136
4022-      PQDMEM2 1138    1       .138
4023-      PQDMEM2 1147    1       .147
4024-      PQDMEM2 1148    1       .148
4025-      PQDMEM2 1150    1       .150
4026-      PQDMEM2 1155    1       .155
4027-      PQDMEM2 1165    1       .165
4028-      PQDMEM2 1166    1       .166
4029-      PQDMEM2 1170    1       .170
4030-      PQDMEM2 1176    1       .176
4031-      PQDMEM2 1183    1       .183
4032-      PQDMEM2 1187    1       .187
4033-      PQDMEM2 1193    1       .193
4034-      PQDMEM2 1195    1       .195
4035-      PQDMEM2 1204    1       .204
4036-      PQDMEM2 1208    1       .208
4037-      PQDMEM2 1210    1       .210
4038-      PQDMEM2 1218    1       .218
4039-      PQDMEM2 1224    1       .224
4040-      PQDMEM2 1229    1       .229
4041-      PQDMEM2 1232    1       .232
4042-      PQDMEM2 1239    1       .239
4043-      PQDMEM2 1252    1       .252
4044-      PQDMEM2 1254    1       .254
4045-      PQDMEM2 1260    1       .260
4046-      PQDMEM2 1264    1       .264
4047-      PQDMEM2 1266    1       .266
4048-      PQDMEM2 1267    1       .267
4049-      PQDMEM2 1271    1       .271
4050-      PQDMEM2 1273    1       .273
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SORTED BULK DATA ECHO

CARD COUNT	. 1 .. 2 .. 3 .. 4 .. 5 .. 6 .. 7 .. 8 .. 9 .. 10 .
4051-	PQDMEM2 1275 1 .275
4052-	PQDMEM2 1279 1 .279
4053-	PQDMEM2 1285 1 .285
4054-	PQDMEM2 1289 1 .289
4055-	PQDMEM2 1297 1 .297
4056-	PQDMEM2 1298 1 .298
4057-	PQDMEM2 1300 1 .300
4058-	PQDMEM2 1305 1 .305
4059-	PQDMEM2 1308 1 .308
4060-	PQDMEM2 1309 1 .309
4061-	PQDMEM2 1314 1 .314
4062-	PQDMEM2 1324 1 .324
4063-	PQDMEM2 1325 1 .325
4064-	PQDMEM2 1335 1 .335
4065-	PQDMEM2 1341 1 .341
4066-	PQDMEM2 1342 1 .342
4067-	PQDMEM2 1345 1 .345
4068-	PQDMEM2 1350 1 .350
4069-	PQDMEM2 1355 1 .355
4070-	PQDMEM2 1359 1 .359
4071-	PQDMEM2 1361 1 .361
4072-	PQDMEM2 1366 1 .366
4073-	PQDMEM2 1367 1 .367
4074-	PQDMEM2 1372 1 .372
4075-	PQDMEM2 1381 1 .381
4076-	PQDMEM2 1385 1 .385
4077-	PQDMEM2 1390 1 .390
4078-	PQDMEM2 1400 1 .400
4079-	PQDMEM2 1402 1 .402
4080-	PQDMEM2 1409 1 .409
4081-	PQDMEM2 1413 1 .413
4082-	PQDMEM2 1425 1 .425
4083-	PQDMEM2 1431 1 .431
4084-	PQDMEM2 1436 1 .436
4085-	PQDMEM2 1450 1 .450
4086-	PQDMEM2 1460 1 .460
4087-	PQDMEM2 1470 1 .470
4088-	PQDMEM2 1480 1 .480
4089-	PQDMEM2 1486 1 .486
4090-	PQDMEM2 1494 1 .494
4091-	PQDMEM2 1503 1 .503
4092-	PQDMEM2 1511 1 .511
4093-	PQDMEM2 1518 1 .518
4094-	PQDMEM2 1530 1 .530
4095-	PQDMEM2 1535 1 .535
4096-	PQDMEM2 1537 1 .537
4097-	PQDMEM2 1550 1 .550
4098-	PQDMEM2 1554 1 .554
4099-	PQDMEM2 1561 1 .561
4100-	PQDMEM2 1564 1 .564

SORTED BULK DATA ECHO

CARD COUNT	. 1 .. 2 .. 3 .. 4 .. 5 .. 6 .. 7 .. 8 .. 9 .. 10 .
4101-	PQDMEM2 1565 1 .565
4102-	PQDMEM2 1585 1 .585
4103-	PQDMEM2 1598 1 .598
4104-	PQDMEM2 1600 1 .600
4105-	PQDMEM2 1615 1 .615
4106-	PQDMEM2 1640 1 .640
4107-	PQDMEM2 1667 1 .667
4108-	PQDMEM2 1680 1 .680
4109-	PQDMEM2 1690 1 .690
4110-	PQDMEM2 1720 1 .720
4111-	PQDMEM2 1730 1 .730
4112-	PQDMEM2 1732 1 .732
4113-	PQDMEM2 1740 1 .740
4114-	PQDMEM2 1750 1 .750
4115-	PQDMEM2 1762 1 .762
4116-	PQDMEM2 1775 1 .775
4117-	PQDMEM2 1795 1 .795
4118-	PQDMEM2 1809 1 .809
4119-	PQDMEM2 1820 1 .820
4120-	PQDMEM2 1858 1 .858
4121-	PQDMEM2 1886 1 .886
4122-	PQDMEM2 2050 2 .050
4123-	PQDMEM2 4055 4 .055
4124-	PQDMEM2 4060 4 .060
4125-	PQDMEM2 11010 1 1.010
4126-	PQDMEM2 11020 1 1.020
4127-	PQDMEM2 11025 1 1.025
4128-	PQDMEM2 11050 1 1.050
4129-	PQDMEM2 11114 1 1.114
4130-	PQDMEM2 11310 1 1.310
4131-	PQDMEM2 11318 1 1.318
4132-	PQDMEM2 11388 1 1.388
4133-	PQDMEM2 11410 1 1.410
4134-	PQDMEM2 11417 1 1.417
4135-	PQDMEM2 11496 1 1.496
4136-	PQDMEM2 11808 1 1.808
4137-	PQUAD2 21203 2 1.203
4138-	PQUAD2 21454 2 1.454
4139-	PQUAD2 21478 2 1.478
4140-	PQUAD2 21488 2 1.488
4141-	PQUAD2 21514 2 1.514
4142-	PQUAD2 21518 2 1.518
4143-	PQUAD2 21531 2 1.531
4144-	PQUAD2 21535 2 1.535
4145-	PQUAD2 21555 2 1.555
4146-	PQUAD2 21559 2 1.559
4147-	PQUAD2 21589 2 1.589
4148-	PQUAD2 21600 2 1.600
4149-	PQUAD2 21620 2 1.620
4150-	PQUAD2 21629 2 1.629

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
4151-	PQUAD2	21640	2	1.640						
4152-	PQUAD2	21650	2	1.650						
4153-	PQUAD2	21665	2	1.665						
4154-	PQUAD2	21670	2	1.670						
4155-	PQUAD2	21690	2	1.690						
4156-	PQUAD2	21720	2	1.720						
4157-	PQUAD2	21730	2	1.730						
4158-	PQUAD2	21748	2	1.748						
4159-	PQUAD2	21770	2	1.770						
4160-	PQUAD2	21775	2	1.775						
4161-	PQUAD2	21804	2	1.804						
4162-	PQUAD2	21830	2	1.830						
4163-	PQUAD2	21837	2	1.837						
4164-	PQUAD2	21905	2	1.905						
4165-	PQUAD2	21910	2	1.910						
4166-	PQUAD2	21912	2	1.912						
4167-	PQUAD2	21930	2	1.930						
4168-	PQUAD2	21960	2	1.960						
4169-	PQUAD2	21970	2	1.970						
4170-	PQUAD2	22023	2	2.023						
4171-	PQUAD2	22050	2	2.050						
4172-	PQUAD2	22131	2	2.131						
4173-	PQUAD2	22262	2	2.262						
4174-	PQUAD2	22359	2	2.359						
4175-	PQUAD2	22406	2	2.406						
4176-	PQUAD2	22711	2	2.711						
4177-	PQUAD2	22770	2	2.770						
4178-	PQUAD2	23196	2	3.196						
4179-	PQUAD2	24262	2	4.262						
4180-	PSHEAR	1040	1	.040						
4181-	PSHEAR	1050	1	.050						
4182-	PSHEAR	1051	1	.051						
4183-	PSHEAR	1063	1	.063						
4184-	PSHEAR	1070	1	.070						
4185-	PSHEAR	1071	1	.071						
4186-	PSHEAR	1080	1	.080						
4187-	PSHEAR	1081	1	.081						
4188-	PSHEAR	1090	1	.090						
4189-	PSHEAR	1092	1	.092						
4190-	PSHEAR	1100	1	.100						
4191-	PSHEAR	1110	1	.110						
4192-	PSHEAR	1113	1	.113						
4193-	PSHEAR	1120	1	.120						
4194-	PSHEAR	1125	1	.125						
4195-	PSHEAR	1127	1	.127						
4196-	PSHEAR	1130	1	.130						
4197-	PSHEAR	1135	1	.135						
4198-	PSHEAR	1138	1	.138						
4199-	PSHEAR	1140	1	.140						
4200-	PSHEAR	1150	1	.150						

SORTED BULK DATA ECHO

CARD COUNT	. 1 ..	2 ..	3 ..	4 ..	5 ..	6 ..	7 ..	8 ..	9 ..	10 .
4201-	PSHEAR	1160	1	.160						
4202-	PSHEAR	1170	1	.170						
4203-	PSHEAR	1174	1	.174						
4204-	PSHEAR	1175	1	.175						
4205-	PSHEAR	1180	1	.180						
4206-	PSHEAR	1181	1	.181						
4207-	PSHEAR	1182	1	.182						
4208-	PSHEAR	1190	1	.190						
4209-	PSHEAR	1200	1	.200						
4210-	PSHEAR	1212	1	.212						
4211-	PSHEAR	1214	1	.214						
4212-	PSHEAR	1220	1	.220						
4213-	PSHEAR	1225	1	.225						
4214-	PSHEAR	1240	1	.240						
4215-	PSHEAR	1250	1	.250						
4216-	PSHEAR	1260	1	.260						
4217-	PSHEAR	1280	1	.280						
4218-	PSHEAR	1290	1	.290						
4219-	PSHEAR	1320	1	.320						
4220-	PSHEAR	1340	1	.340						
4221-	PSHEAR	1380	1	.380						
4222-	PSHEAR	1630	1	.630						
4223-	PSHEAR	2250	2	.250						
4224-	PSHEAR	2300	2	.300						
4225-	PSHEAR	2350	2	.350						
4226-	PSHEAR	2600	2	.600						
4227-	PSHEAR	3061	3	.061						
4228-	PSHEAR	3071	3	.071						
4229-	PSHEAR	3076	3	.076						
4230-	PSHEAR	3086	3	.086						
4231-	PSHEAR	3092	3	.092						
4232-	PSHEAR	3093	3	.093						
4233-	PSHEAR	3125	3	.125						
4234-	PSHEAR	11250	1	1.250						
4235-	PTRIA2	21770	2	1.770						
4236-	PTRIA2	21804	2	1.804						
4237-	PTRIA2	22406	2	2.406						
4238-	PTRIA2	22770	2	2.770						
4239-	PTRIA2	23196	2	3.196						
4240-	PTRMEM	1040	1	.040						
4241-	PTRMEM	1050	1	.050						
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4244-	PTRMEM	1150	1	.150						
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4247-	PTRMEM	1436	1	.436						
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4250-	PTRMEM	1559	1	.559						

SORTED BULK DATA ECHO

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4251-      PTRMEM  1575    1        .575
4252-      PTRMEM  1957    1        .957
4253-      PTRMEM  3050    3        .050
4254-      PTRMEM  3056    3        .056
4255-      PTRMEM  3058    3        .058
4256-      PTRMEM  3088    3        .088
4257-      PTRMEM  4055    4        .055
4258-      SPC1    1       3        1015
4259-      SPC1    1       123      1000    1(50
4260-      SPC1    1       123456   1099
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1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
NASA CR-170392		

4. Title and Subtitle	5. Report Date
NASTRAN Model of a Large Flexible Swing-Wing Bomber. Volume III: NASTRAN Model Development—Wing Structure	September 1982
	6. Performing Organization Code

7. Author(s)	8. Performing Organization Report No.
W. D. Mock and R. A. Latham	NA-76-469
	10. Work Unit No.
9. Performing Organization Name and Address Rockwell International Los Angeles Division International Airport Los Angeles, CA 90009	11. Contract or Grant No. NAS4-2432
	13. Type of Report and Period Covered Contractor Report—Final
12. Sponsoring Agency Name and Address National Aeronautics and Space Administration Washington, D.C. 20546	14. Sponsoring Agency Code RTOP 505-33-54

15. Supplementary Notes

NASA Technical Monitor: Lawrence S. Schuster, Ames Research Center, Dryden Flight Research Facility

16. Abstract

This report describes the planning, development, and validation of the NASTRAN models of the B-1 aircraft No. 2 structure. Volume I describes the initial planning of the entire modeling effort. Volumes II to V describe, in detail, the development and validation of component structural models. The report includes applicable engineering drawings, NASTRAN structural model plots, and listings of the NASTRAN bulk data deck for each component structure. Validation is documented by comparisons with results from static structural tests.

The subtitles of the volumes included in this report are as follows:

Volume I. NASTRAN Model Plans
Volume II. NASTRAN Model Development—Horizontal Stabilizer, Vertical Stabilizer, and Nacelle Structures
Volume III. NASTRAN Model Development—Wing Structure
Volume IV. NASTRAN Model Development—Fuselage Structure
Volume V. NASTRAN Model Development—Fairing Structure

17. Key Words (Suggested by Author(s))	18. Distribution Statement
NASTRAN Finite elements Structural modeling	Unclassified-Unlimited STAR category 05

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price*
Unclassified	Unclassified	200	A09

For sale by the National Technical Information Service, Springfield, Virginia 22161

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