

Table 23 Input data for the PANDA2 processor STAGSUNIT (allenflat3.STG) for generating the STAGS input files, allenflat3.bin and allenflat3.inp . This file pertains to the 10-stringer-bay flat panel.

```
=====
n          $ Do you want a tutorial session and tutorial output?
  1        $ Choose type of STAGS analysis (1,3,4,5,6),INDIC
  0        $ Restart from ISTARTth load step (0=1st nonlinear soln), ISTART
1.000000   $ Local buckling load factor from PANDA2, EIGLOC
  y        $ Are the dimensions in this case in inches?
  0        $ Nonlinear (0) or linear (1) kinematic relations?, ILIN
  0        $ Type 1 for closed (360-deg) cyl. shell, 0 otherwise, ITOTAL
9.779300   $ X-direction length of the STAGS model of the panel: XSTAGS
24.705     $ Panel length in the plane of the screen, L2
  y        $ Is the nodal point spacing uniform along the stringer axis?
  61       $ Number of nodes in the X-direction: NODEX
-100.0000  $ Resultant (e.g. lb/in) normal to the plane of screen, Nx
  0        $ Resultant (e.g. lb/in) in the plane of the screen,   Ny
  0        $ In-plane shear in load set A,                          Nxy
  0        $ Normal pressure in STAGS model in Load Set A, p
  0        $ Resultant (e.g. lb/in) normal to the plane of screen, Nx0
  0        $ Resultant (e.g. lb/in) in the plane of the screen,   Ny0
  0        $ Normal pressure in STAGS model in Load Set B, p0
1.000000   $ Starting load factor for Load System A, STLD(1)
  0        $ Load factor increment for Load System A, STEP(1)
1.000000   $ Maximum load factor for Load System A, FACM(1)
  0        $ Starting load factor for Load System B, STLD(2)
  0        $ Load factor increment for Load System B, STEP(2)
  0        $ Maximum load factor for Load System B, FACM(2)
  1        $ How many eigenvalues do you want? NEIGS
480        $ Choose element type: 480 or 410 or 940
n          $ Have you obtained buckling modes from STAGS for this case?
  11       $ Number of stringers in STAGS model of the flat panel
  2        $ Number of rings in the STAGS model of the panel
  y        $ Are there rings at the ends of the panel?
  0        $ Number of finite elements between adjacent stringers
100        $ Number of finite elements over circumference, NELCIR
  30       $ Number of finite elements between adjacent rings
  3        $ Stringer model: 1 or 2 or 3 or 4 or 5(Type H(elp))
  3        $ Ring model: 1 or 2 or 3 or 4 or 5 (Type H(elp))
  0        $ Reference surface of cyl: 1=outer, 0=middle, -1=inner
n          $ Do you want to use fasteners (they are like rigid links)?
n          $ Are the stringers to be "smeared out"?
n          $ Is the nodal point spacing uniform around the circumference?
4.446900   $ Circ. callout Y(i) where the nodal point spacing changes, Y( 1)
  19       $ Number of nodes n(i) from Y(i-1) to Y(i) (n=odd!), n( 1)
  y        $ Are there any more interior axial stations y where dy changes?
4.693950   $ Circ. callout Y(i) where the nodal point spacing changes, Y( 2)
  3        $ Number of nodes n(i) from Y(i-1) to Y(i) (n=odd!), n( 2)
  y        $ Are there any more interior axial stations y where dy changes?
5.188050   $ Circ. callout Y(i) where the nodal point spacing changes, Y( 3)
  17       $ Number of nodes n(i) from Y(i-1) to Y(i) (n=odd!), n( 3)
  y        $ Are there any more interior axial stations y where dy changes?
5.435100   $ Circ. callout Y(i) where the nodal point spacing changes, Y( 4)
=====
```

```

3      $ Number of nodes n(i) from Y(i-1) to Y(i) (n=odd!), n( 4)
y      $ Are there any more interior axial stations y where dy changes?
6.917400 $ Circ. callout Y(i) where the nodal point spacing changes, Y( 5)
7      $ Number of nodes n(i) from Y(i-1) to Y(i) (n=odd!), n( 5)
y      $ Are there any more interior axial stations y where dy changes?
7.905600 $ Circ. callout Y(i) where the nodal point spacing changes, Y( 6)
9      $ Number of nodes n(i) from Y(i-1) to Y(i) (n=odd!), n( 6)
n      $ Are there any more interior axial stations y where dy changes?
69     $ Number of nodes n(i) from last Y to y = YSTAGS, n( 7)
n      $ Are the rings to be "smeared out"?
5      $ Number of nodes over height of stiffener webs, NODWEB
5      $ Number of nodes over width of stringer flange, NDFLGS
5      $ Number of nodes over width of ring flange, NDFLGR
n      $ Do you want stringer(s) with a high nodal point density?
n      $ Do you want ring(s) with a high nodal point density?
n      $ Is there plasticity in this STAGS model?
n      $ Do you want to use the "least-squares" model for torque?
n      $ Is stiffener sidesway permitted at the panel edges?
n      $ Do you want symmetry conditions along the straight edges?
1      $ Edges normal to screen (0) in-plane deformable; (1) rigid
1      $ Edges parallel to screen (0) in-plane deformable; (1) rigid
1      $ Stringer web axial displacement index, IBCX0XL=0 or 1
=====

```