

5-bay flat panel: Input for the PANDA2 processor, STAGSUNIT, is listed in Table 19

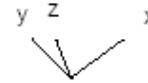
PA= 1.00000E+01 PB= 0.00000E+00 PX= 0.00000E+00

step 459 displacement w contours

Fig.52 nonlinear w same view as linear buckling mode; case=allflat

Minimum value = -5.64984E-02, Maximum value = 5.36689E-02

Θ x -35.84
Θ y -13.14
Θ z 35.63



2.989E+00

Fig. 52 STAGS prediction of deformed state of the flat panel at the design load, PA = 10.0 ($N_x = -1000$ lb/in). This static nonlinear equilibrium state is determined by a STAGS (INDIC=3) nonlinear static equilibrium run that follows the transient (INDIC=6) run. The run stream is listed in Table 25. Load relaxation is first applied in order to dissipate the kinetic energy, then the loading is increased and the Riks method is re-applied until either the maximum specified load factor, PA = 10.0, is attained or until it becomes obvious that another transient STAGS run is required at some load factor above PA = 7.555 and below PA = 10.0. No overall axial bending nor in-plane panel skin edge warping is permitted in this STAGS model. Compare this figure with the previous figure. The central stringer bay has seven axial half waves over the axial length x, and all the other stringer bays have five axial half waves.