STAGS "refined" 180-degree "soccerball" model

Optimized thick-apex unstiffened equivalent ellipsoidal shell. Refined model with 480 elements
eig. 1, pcr(STAGS) =2.7574 x 460 =1268.4 psi; BIGBOSOR4 gets 1270.7 psi
step 0 eigenvector deformed geometry. Axisymmetric mode 1
linear buckling of perfect unstiffened 180-degree "soccerball" shell from STAGS

Θ x -35.84
Θ y -13.14
Θ z   35.63

Fig. 177 Linear buckling mode from STAGS that corresponds to the lowest eigenvalue for the **optimized unstiffened equivalent ellipsoidal shell with the thick apex with t(apex) = 0.4 inch; the optimum design is listed in Table 78.** Compare this 180-degree "soccerball" model with the 360-degree STAGS model displayed in Fig. 147. Also compare this mode with the axisymmetric mode 1 determined by BIGBOSOR4 and displayed in Fig. 145.