

eigenvalue 4, pcr(STAGS)=2.874 x 460 = 1322.0 psi; n=2 circumferential waves Θ x -35.84 step 0 eigenvector deformed geometry Θ y -13.14 Θ z 35.63 linear buckling of perfect shell: unstiffened equivalent ellipsoid with thick apex (Seg. 1)

Fig. 149 Non-axisymmetric (n=2 circumferential waves) linear buckling mode from STAGS that corresponds to the fourth 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 mode with that from the STAGS "soccerball" model shown in Fig. 178, which is for the same shell. Shells of revolution with imperfections with this non-axisymmetric shape cannot be handled by BIGBOSOR4. Therefore, GENOPT optimization occurs in the presence of only axisymmetric buckling modal imperfections.