



Fig. 148 Non-axisymmetric (**$n=1$ circumferential wave**) linear buckling mode from STAGS that corresponds to the second eigenvalue for the **optimized unstiffened equivalent ellipsoidal shell with the thick apex with $t(\text{apex}) = 0.4$ inch; the optimum design is listed in Table 78.** Compare this mode with that obtained from the STAGS “soccerball” models displayed in Figs. 179 and 190 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.