

The unstiffened shell was optimized by GENOPT with Mode 1,2,3,and 4 axisymmetric imperfections.

STAGS linear buckling mode 9, pcr= 1.8303 x 460 psi

⊙ x -35.84 ⊙ y -13.14 ⊙ z 35.63

BIGBOSOR4 gets 1.7912 x 460 psi Mode 3 axisymmetric linear buckling of perfect shell from STAGS



Fig. 107 +Mode 3 axisymmetric linear buckling modal imperfection shape from STAGS for the 4-mode-optimized design of the **unstiffened**, **imperfect** equivalent ellipsoidal shell listed in Table 65. The optimum design was obtained with BIGBOSOR4 with the use of plus and minus axisymmetric **mode 1**, **mode 2**, **mode 3**, **and mode 4** imperfection shapes with amplitude, Wimp = 0.2 inch. This STAGS buckling mode corresponds to eigenvalue no. 9. Compare with the **+mode 3** imperfection shape predicted by BIGBOSOR4 (Fig. 100) and with the +mode 2 imperfection shape displayed in Fig. 78 predicted by STAGS for the "2-mode" optimized unstiffened shell listed in Table 33 under the heading "unstiffened, imperfect".