

This is a spurious buckling mode for the isogrid-stiffened shell. See the next figure. mode 1, buckling pressure = $0.65392 \times 460 = 300.472 \,\mathrm{psi}$ $\Theta \times -35.84$ $\Theta \times -13.14$ step 8 eigenvector deformed geometry $\Theta \times -13.14$ $\Theta \times -13.63$ nonlinear buckling of imperfect isogrid-stiffened equivalent ellipsoidal shell from STAGS

Fig. 18 Spurious nonlinear bifurcation buckling mode from STAGS for the optimized **imperfect isogrid-stiffened** equivalent ellipsoidal shell with a —mode 1 axisymmetric imperfection shape (negative of mode shape shown in Fig. 6). The spurious mode occurs in the neighborhood of the pole. It cannot be seen here but shows up clearly in the next figure. The presence of this spurious mode does not appear to affect the primary nonlinear static response of the imperfect shell.