

Fig. 19 Enlarged view of the 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. The presence of this spurious mode does not seem to affect the primary nonlinear static response of the imperfect shell. Spurious modes such as this did not show up in connection with use of the 180-degree "soccerball" models such as that displayed in Figs. 169 and Figs. $a^2 - a^3$.