



Fig. 74 First **axisymmetric** linear bifurcation buckling mode shape of the optimized **unstiffened** shell as computed by BIGBOSOR4. The corresponding linear bifurcation buckling pressure according to BIGBOSOR4 is  $p(\text{crit}) = 658$  psi. The program STAGS obtains a linear bifurcation buckling pressure of 666 psi for this shell. (See Fig. 76). This axisymmetric mode corresponds to the lowest eigenvalue in the STAGS model, as listed in Table 60. Compare with Fig. 76. Plus and minus versions of “**mode 1**” are used as initial axisymmetric imperfection shapes in computations of the local skin and stiffener stresses and buckling load factors, axisymmetric collapse loads, and general nonlinear bifurcation buckling load factors. Compare with the axisymmetric buckling modes for the “thick apex” optimum designs shown in Figs. 145 and 229.