

The stiffened shell was optimized by GENOPT with very tiny Mode 1 and 2 axisymmetric imperfections. STAGS linear buckling mode 1, pcr=  $1.2152 \times 460 \text{ psi}$   $\Theta$  x -35.84  $\Theta$  y -13.14  $\Theta$  z  $\Theta$  z  $\Theta$  z  $\Theta$  z  $\Theta$  linear buckling of isogrid-stiffened perfect shell, optimized with very tiny mode 1 and 2 imperfections.

Fig. 119 n = 1 circumferential wave non-axisymmetric linear buckling mode shape from STAGS for the optimized design of the "**perfect" isogrid-stiffened** equivalent ellipsoidal shell. The optimum design is listed in Table 33 under the heading, "isogrid-stiffened, perfect". This STAGS buckling mode corresponds to eigenvalue no. 1. This is the only case in which the fundamental buckling load of the perfect shell is non-axisymmetric. Eigenvalue no. 2 is identical to eigenvalue no. 1 and its eigenvector (mode shape) is the same as that displayed here except that it is rotated circumferentially.