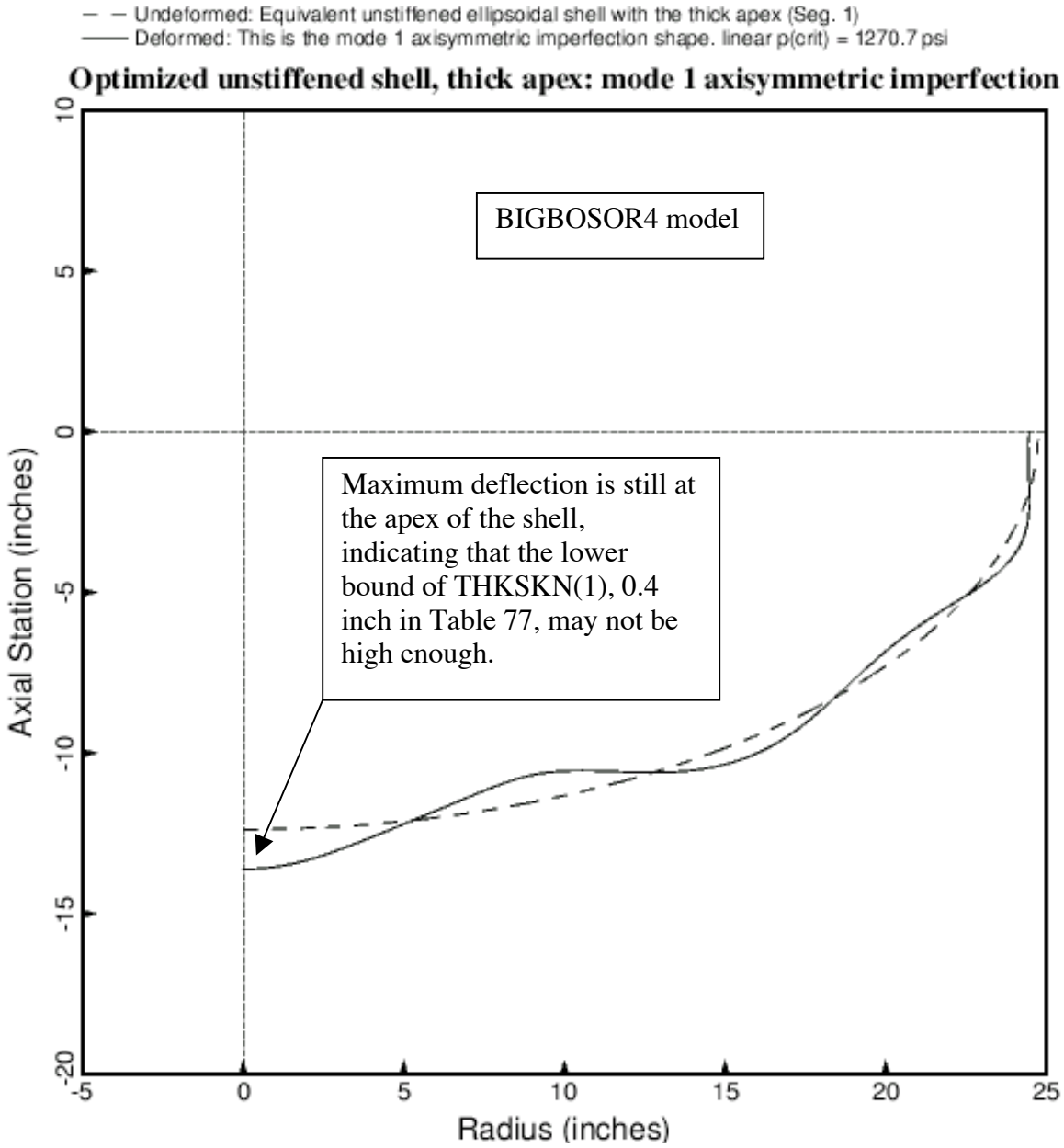

Fig. 145 Axisymmetric **mode 1** linear buckling mode from BIGBOSOR4 for the **optimized unstiffened equivalent ellipsoidal shell with the thick apex of uniform thickness, t(apex) = 0.4 inch; the optimum design is listed in Table 78.** The shell was optimized with plus and minus axisymmetric buckling modal imperfection shapes, mode 1 and mode 2 with amplitude, **Wimp=0.2** inch. Notice that the shell apex is not thick enough to prevent the maximum linear buckling modal displacement from occurring at the pole of the shell. However, the mode 1 linear axisymmetric buckling mode shown here has significant amplitude in the region away from the apex, unlike the mode 1 axisymmetric linear buckling mode displayed in Fig. 74. It turns out that this shell is still underdesigned, but much less so than the design listed for the unstiffened imperfect shell listed in Table 33: compare the non-axisymmetric collapse in Fig. 94 with that in Fig. 161.