



Fig. 248 The **optimized unstiffened equivalent ellipsoidal shell with the thick apex with  $t(\text{apex}) = 0.61996$  inch;  $W_{\text{imp}} = 0.2$  inch; the optimum design is listed in Table 93. Case 2:** State of the shell at load set B (PB) step no. 66 in Run 7 (**residual dent**). (See Fig. 245). Load set B consists of a number of concentrated inward directed normal loads applied along row 3 of shell segment 5 (**Case 2**) (Figs. 2, 169, 232 and 233) distributed as  $\cos(\theta)$  from  $\theta = 0$  to 90 degrees in the circumferential direction. This load distribution is used because it generates a residual dent that **locally** resembles the deformation in Figs. 232 and 233, that is, the linear buckling modal imperfection with  $n = 1$  circumferential wave. Compare with Fig. 243.