

Fig. 243 The optimized unstiffened equivalent ellipsoidal shell with the thick apex with t(apex) = 0.61996 inch; Wimp=0.2 inch; the optimum design is listed in Table 93. Case 1: State of the shell at load set B (PB) step no. 51 in Run 6 (residual dent). (See Fig. 240). Load set B consists of a number of concentrated inward directed normal loads applied along row 2 of shell segment 3 (Case 1) (Figs. 2, 169, 232 and 233) distributed as $\cos(\text{theta})$ 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 negative of the deformation in Fig. 232, that is, the negative of the linear buckling modal imperfection with n = 1 circumferential wave. Compare with Fig. 184, which pertains to the design listed in Table 78.