



Fig. 273 The **optimized isogrid-stiffened equivalent ellipsoidal shell; Wimp=0.2 inch; the optimum design is listed in columns 2 and 3 of Table 33.** State of the shell at load set B (PB) step no. 158 in Run 4 (residual dent). (See Fig. 270). Displayed here is the residual **outer fiber** meridional plastic strain component, ep x , in layer 2 (the shell skin). Load set B consists of a number of concentrated inward directed normal **displacements** applied along row 5 of shell segment 4 (Figs. 2, 169, 262, 271) distributed in the circumferential direction as cos(theta) from theta = 0 to 90 degrees. This “cos(theta)” displacement distribution is used because it generates a residual dent that **locally** resembles the negative of the buckling modal deformation in Fig. 262, that is, the negative of the second linear buckling modal imperfection with $n = 1$ circumferential wave.