- □ STAGS elastic-plastic soccerball model: residual dent depth = 0.295 inch; node 872
- STAGS elastic-plastic soccerball model: residual dent depth = 0.255 inch; node 872
- Δ STAGS elastic-plastic soccerball model: residual dent depth = 0.2226 inch; node 872
- STAGS elastic-plastic soccerball model: residual dent depth = 0.1985 inch; node 872
- × design pressure (psi)

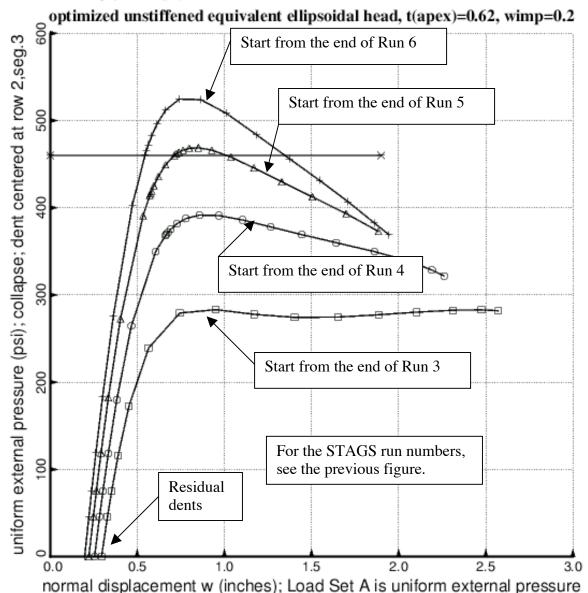


Fig. 241 Elastic-plastic analysis of the **optimized unstiffened equivalent ellipsoidal shell with the thick apex with t(apex) = 0.61996 inch; Wimp=0.2 inch; the optimum design is listed in Table 93.** Collapse of the imperfect shell with **Case 1** residual dents of various depths. The **Case 1** dents are generated by a load set B (PB) cycle. Load Set B consists of a number of normal, inward-directed concentrated **loads** applied, in **Case 1**, along row 2 of segment 3 (Figs. 2, 169, 232, and 233) that has a cos(theta) circumferential distribution from theta = 0 to 90 degrees. This "cos(theta)" load distribution is used because it generates a dent that **locally** resembles the negative of the deformation in Figs. 232 and 233, that is, the negative of the linear buckling modal imperfection with n = 1 circumferential wave. Compare with Fig. 217.