



Fig. 275 The **optimized isogrid-stiffened equivalent ellipsoidal shell;  $W_{imp}=0.2$  inch; the optimum design is listed in columns 2 and 3 of Table 33.** Shown here are load-deflection curves for the optimized stiffened shell with various residual dents loaded by uniform external normal pressure (Load Set A). Notice that in each of the three cases the depth of the residual “ $\cos(\theta)$ ” dent is greater than the depth,  $W_{imp} = 0.2$  inch, of each of the axisymmetric linear buckling mode 1 or mode 2 imperfection shapes, in the presence of which the shell was optimized. Therefore, these curves represent conservative estimates of the load-carrying capability of the dented shells, the optimum design of which is listed in columns 2 and 3 of Table 33.