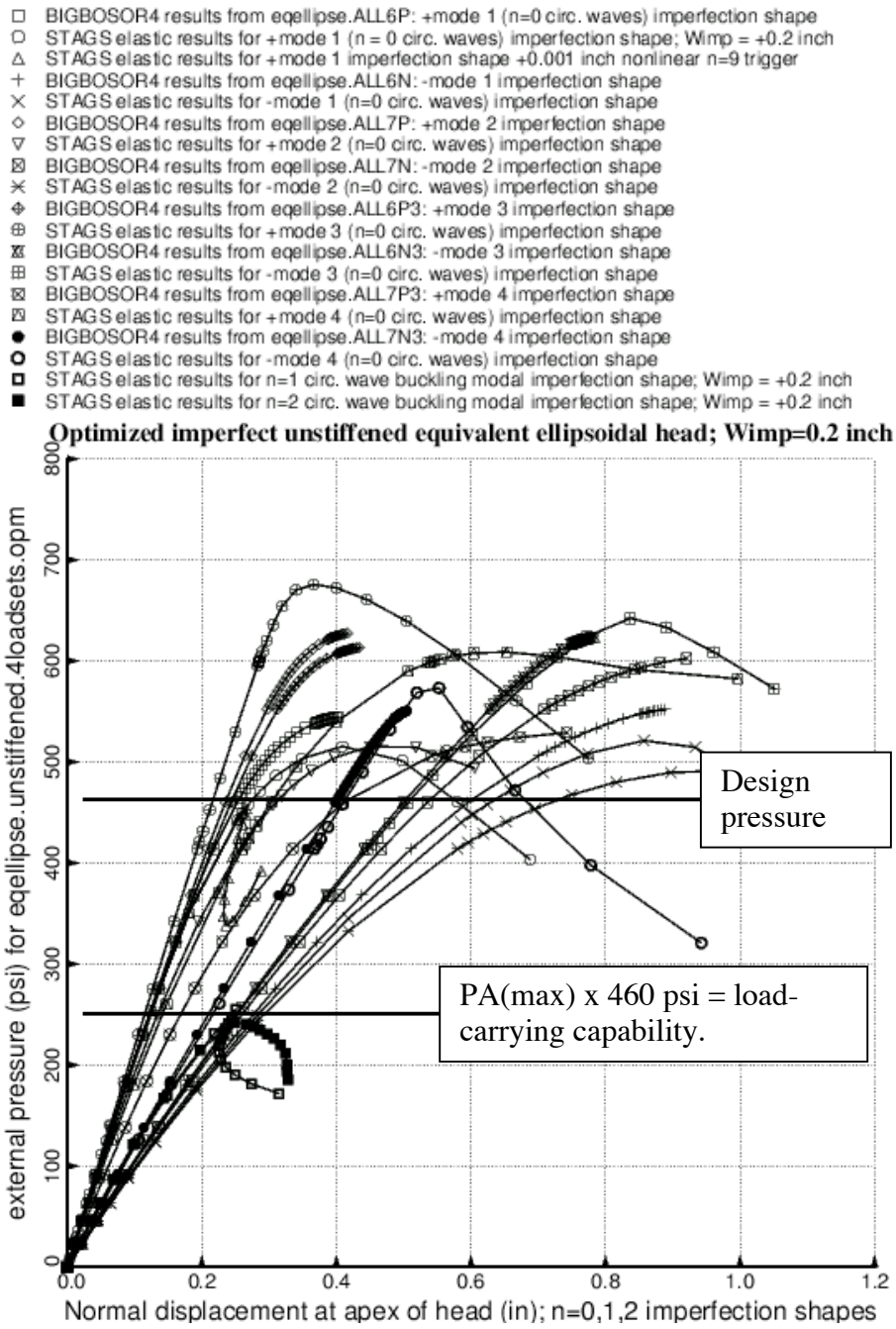

Fig. 109 Nonlinear elastic load-deflection curves for the 4-mode-optimized **imperfect unstiffened** equivalent ellipsoidal shell from BIGBOSOR4 (axisymmetric deformation) and from STAGS (both axisymmetric and non-axisymmetric deformation). The most important points to be emphasized with regard to this figure are: 1. There are significant discrepancies between the predictions of BIGBOSOR4 and STAGS for the axisymmetrically imperfect shells, and 2. the load-bearing capability of the shell, which is optimized only with regard to axisymmetric imperfections (Figs. 98-101), is much more sensitive to non-axisymmetric buckling modal imperfections with n = 1 and n = 2 circumferential waves. This optimized unstiffened imperfect shell is under-designed.