□ weight of the equivalent unstiffened ellipsoidal head: WEIGHT (lb)(IDESGN=3)

GENOPT, equivalent unstiffened ellipsoidal shell with IDESGN=3

GENOPT optimization

Objective: weight of the equivalent unstiffened ellipsoidal head (lb)

Design Iterations: 1st SUPEROPT run; IDESGN=3 (MILDLY UNFEASIBLE

Fig. 69 Optimization of the axisymmetrically **imperfect unstiffened** equivalent ellipsoidal shell via the first execution of SUPEROPT. The index, IDESIGN, is set equal to 3 in MAINSETUP. IDESIGN = 3 means that "MILDLY UNFEASIBLE" designs are accepted. "MILDLY UNFEASIBLE" means that all design margins must be greater than –0.1. See Item 725 in Table a24 for more about IDESIGN. The preferred value of IDESIGN in the *.OPT file is usually IDESIGN = 2 (ALMOST FEASIBLE designs accepted by GENOPT). During this and the next four executions of SUPEROPT optimum designs are obtained with plus and minus axisymmetric mode 1 and mode 2 linear buckling modal imperfection shapes. The starting design is listed near the top of Table 56.