Table a46 STAGS input file, **soccerball.bin**, corresponding to the input file, *.inp, listed in Table a40, that is, loading is by an **imposed normal displacement** that varies as **cos(theta)** from 0 to 90 degrees and that is imposed along a circumferential line at the junction between shell segments 3 and 4 in Figs. 2, a1-a3. In this STAGS run the imposed normal displacement continues to increase above 1.3 inches, the maximum value in Load Set B listed in Table a41. We want to produce a residual dent with a depth of close to 0.2 inch, and we need to increase the maximum applied normal displacement to a greater value than 1.3 in order to do this. The results from this run are shown as Run 5 in Table 88 and in Fig. 193.

```
==================================================================
 optimized imperfect shell, nonlinear theory (INDIC=3)
 3, $ INDIC=1 is bifur.buckling; INDIC=3 is nonlinear BEGIN B-1
 1, $ IPOST=1 means save displacements every IPOSTth step
 0, $ ILIST =0 means normal batch-oriented output
 0, $ ICOR  =0 means projection in; 1 means not in.
 1, $ IMPTHE=index for imperfection theory.
 0, $ IOPTIM=0 means bandwith optimization will be performed
 0, $ IFLU  =0 means no fluid interaction.
 -1 $ ISOLVR= 0 means original solver; -1 new solver.END B-1 rec
 0.0, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.0, $ STEP(1) = load factor increment, System A
 0.0, $ FACM(1) = maximum load factor, System A
 1.3, $ STLD(2) = starting load factor, System B
 1.0, $ STEP(2) = load factor increment, System B
 2.0, $ FACM(2) = maximum load factor, System B
 0  $ ITEMP =0 means no thermal loads. END C-1 rec.
 37, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 0,$ NSEC= number of CPU seconds before run termination
 10,$ NCUT = number of times step size may be cut
  -20, $ NEWT = number of refactorings allowed
 -1,$ NSTRAT=-1 means path length used as independent parameter
 0.00010,$ DELX=convergence tolerance
 0. $ WUND = 0 means initial relaxation factor =1.END D-1 rec.
 0, 0, 0  $ NPATH=0: Riks, NEIGS=no.of eigs, NSOL=1=discontin.ET-1
==================================================================
```