

Table a42 Input data, **soccerball.bin**, for load-relaxation (NPATH = 5). This file corresponds to the STAGS run that immediately follows the run that produces the **cos(theta)** dent with amplitude 1.3 inch (Run 1, Fig 193). The purpose of this STAGS run is to **remove the imposed displacement** in order to generate a RESIDUAL dent with no loads applied to the shell. This RESIDUAL dent then acts as an initial imperfection in the following STAGS run in which the uniform normal pressure (Load Set A) will be applied. Notice especially that the index, NPATH, is set equal to 5 for the "load relaxation" strategy in STAGS. Corresponding to this *.bin file, the Load Set B loads in the *.inp file **MUST BE REMOVED** if LOAD SET B represents imposed displacement.

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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 bandwidth optimization will be performed
0, $ IFLU  =0 means no fluid interaction.
-1 $ ISOLVR= 0 means original solver; -1 new solver.END B-1 rec
0.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
1.000E-02, $ STEP(1) = load factor increment, System A
1.000E-02, $ FACM(1) = maximum load factor, System A
0.0, $ STLD(2) = starting load factor, System B
0.0, $ STEP(2) = load factor increment, System B
0.0, $ 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
0, $ 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.
5, 0, 0 $ NPATH=0: Riks, NEIGS=no.of eigs, NSOL=1 = discontin.ET-1
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