Table 87 **Sequence of STAGS runs to produce a "cos(theta)" shaped dent and to determine the collapse pressure for the optimized unstiffened imperfect shell with a residual "cos(theta)" dent of depth, Wimp = 0.2043 inch.** The "crude 180 degree soccerball" model with 480 finite elements is used (Figs.a2,a3), and **the "cos(theta)" dent is produced by application of point inward normal loads applied along the junction between shell segments 3 and 4 (Figs. 2, 169, 190, 191, a1-a3)** from circumferential coordinate, theta = zero to ninety degrees. See Figs. 180 and 188.

==========

STAGS run 1: soccerball.bin1

```
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
 0.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.000E-02, $ STEP(1) = load factor increment, System A
 0.000E+00, $ FACM(1) = maximum load factor, System A
  200, $ STLD(2) = starting load factor, System B
  200, $ STEP(2) = load factor increment, System B
  2000.0, $ FACM(2) = maximum load factor, System B
 0  $ ITEMP =0 means no thermal loads. END C-1 rec.
  0, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 300,$ 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
 0.0001,$ 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
```

soccerball.out2.1 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
    0  0.000000E+00  0.200000E+03
    1  0.000000E+00  0.200000E+03
    2  0.000000E+00  0.400000E+03
    3  0.000000E+00  0.544053E+03
    4  0.000000E+00  0.750205E+03
    5  0.000000E+00  0.103622E+04
    6  0.000000E+00  0.140963E+04
    7  0.000000E+00  0.182459E+04
    8  0.000000E+00  0.200000E+04
```

STAGS run 2: soccerball.bin2

```
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
 0.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.000E-02, $ STEP(1) = load factor increment, System A
 0.000E+00, $ FACM(1) = maximum load factor, System A
  2000.00, $ STLD(2) = starting load factor, System B
  1.0, $ STEP(2) = load factor increment, System B
  4000.0, $ FACM(2) = maximum load factor, System B
 0  $ ITEMP =0 means no thermal loads. END C-1 rec.
  8, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 500,$ 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
 0.0001,$ 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
```

soccerball.out2.2 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
    8  0.000000E+00  0.200000E+04
    9  0.000000E+00  0.208590E+04
   10  0.000000E+00  0.211329E+04
   11  0.000000E+00  0.211969E+04
   12  0.000000E+00  0.212120E+04
   13  0.000000E+00  0.212007E+04
   14  0.000000E+00  0.211678E+04
   15  0.000000E+00  0.211215E+04
   16  0.000000E+00  0.210688E+04
   17  0.000000E+00  0.210106E+04
   18  0.000000E+00  0.209483E+04
   19  0.000000E+00  0.208733E+04
   20  0.000000E+00  0.207804E+04
```

STAGS run 3: soccerball.bin3

```
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
 0.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.000E-02, $ STEP(1) = load factor increment, System A
 0.000E+00, $ FACM(1) = maximum load factor, System A
  2078.04, $ STLD(2) = starting load factor, System B
  1.0, $ STEP(2) = load factor increment, System B
  4000.0, $ FACM(2) = maximum load factor, System B
 0  $ ITEMP =0 means no thermal loads. END C-1 rec.
 20, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 300,$ 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
 0.0001,$ 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
```

soccerball.out2.3 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
   20  0.000000E+00  0.207804E+04
   21  0.000000E+00  0.206900E+04
   22  0.000000E+00  0.206029E+04
   23  0.000000E+00  0.205039E+04
   24  0.000000E+00  0.204111E+04
   25  0.000000E+00  0.203272E+04
   26  0.000000E+00  0.202379E+04
   27  0.000000E+00  0.201596E+04
   28  0.000000E+00  0.200823E+04
```

STAGS run 4: soccerball.bin4

```
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
```

```
 0.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.000E-02, $ STEP(1) = load factor increment, System A
 0.000E+00, $ FACM(1) = maximum load factor, System A
 2008.23, $ STLD(2) = starting load factor, System B
 -100.0, $ 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.
  28, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 500,$ NSEC= number of CPU seconds before run termination
 12,$ 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.
 0, 0, 1  $ NPATH=0: Riks, NEIGS=no.of eigs, NSOL=1=discontin.ET-1
```

soccerball.out2.4 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
   28  0.000000E+00  0.200823E+04
   29  0.000000E+00  0.190823E+04
   30  0.000000E+00  0.187152E+04
   31  0.000000E+00  0.182153E+04
   32  0.000000E+00  0.174270E+04
   33  0.000000E+00  0.160086E+04
   34  0.000000E+00  0.126926E+04
   35  0.000000E+00  0.228927E+03
   36  0.000000E+00  0.000000E+00
   37  0.000000E+00  0.000000E+00
```

STAGS run 5: soccerball.bin5

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
 0.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.000E-02, $ STEP(1) = load factor increment, System A
 0.000E+00, $ FACM(1) = maximum load factor, System A
  2008.23, $ STLD(2) = starting load factor, System B
  1.0, $ STEP(2) = load factor increment, System B
  4000.0, $ FACM(2) = maximum load factor, System B
 0  $ ITEMP =0 means no thermal loads. END C-1 rec.
```

```
 28, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 300,$ 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
 0.0001,$ 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
```

soccerball.out2.5 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
   28  0.000000E+00  0.200823E+04
   29  0.000000E+00  0.200172E+04
   30  0.000000E+00  0.199695E+04
   31  0.000000E+00  0.199324E+04
   32  0.000000E+00  0.199067E+04
   33  0.000000E+00  0.198971E+04
   34  0.000000E+00  0.199033E+04
   35  0.000000E+00  0.199240E+04
```

STAGS run 6: soccerball.bin6

```
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
 0.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.000E-02, $ STEP(1) = load factor increment, System A
 0.000E+00, $ FACM(1) = maximum load factor, System A
 1992.40, $ STLD(2) = starting load factor, System B
 -100.0, $ 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.
  35, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 500,$ NSEC= number of CPU seconds before run termination
 12,$ 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.
 0, 0, 1  $ NPATH=0: Riks, NEIGS=no.of eigs, NSOL=1=discontin.ET-1
```

soccerball.out2.6 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
   35  0.000000E+00  0.199240E+04
   36  0.000000E+00  0.194240E+04
   37  0.000000E+00  0.191108E+04
   38  0.000000E+00  0.186882E+04
   39  0.000000E+00  0.180190E+04
   40  0.000000E+00  0.169225E+04
   41  0.000000E+00  0.152540E+04
   42  0.000000E+00  0.123227E+04
   43  0.000000E+00  0.167132E+03
   44  0.000000E+00  0.000000E+00
   45  0.000000E+00  0.000000E+00
```

STAGS run 7: soccerball.bin7

```
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
 0.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.000E-02, $ STEP(1) = load factor increment, System A
 0.000E+00, $ FACM(1) = maximum load factor, System A
  1992.40, $ STLD(2) = starting load factor, System B
  1.0, $ STEP(2) = load factor increment, System B
  4000.0, $ FACM(2) = maximum load factor, System B
 0  $ ITEMP =0 means no thermal loads. END C-1 rec.
 35, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 200,$ 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
 0.0001,$ 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
```

soccerball.out2.7 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
   35  0.000000E+00  0.199240E+04
   36  0.000000E+00  0.199576E+04
```

```
   37  0.000000E+00  0.200047E+04
   38  0.000000E+00  0.200748E+04
   39  0.000000E+00  0.201607E+04
   40  0.000000E+00  0.202596E+04
-----------------------------------------------------------------
```

STAGS run 8: soccerball.bin8

```
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
 0.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.000E-02, $ STEP(1) = load factor increment, System A
 0.000E+00, $ FACM(1) = maximum load factor, System A
 2025.96, $ STLD(2) = starting load factor, System B
 -100.0, $ 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.
  40, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 500,$ NSEC= number of CPU seconds before run termination
 12,$ 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.
 0, 0, 1  $ NPATH=0: Riks, NEIGS=no.of eigs, NSOL=1=discontin.ET-1
```

soccerball.out2.8 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
   40  0.000000E+00  0.202596E+04
   41  0.000000E+00  0.192596E+04
   42  0.000000E+00  0.188420E+04
   43  0.000000E+00  0.182850E+04
   44  0.000000E+00  0.174198E+04
   45  0.000000E+00  0.160582E+04
   46  0.000000E+00  0.141683E+04
   47  0.000000E+00  0.114868E+04
   48  0.000000E+00  0.301049E+03
   49  0.000000E+00  0.000000E+00
   50  0.000000E+00  0.000000E+00
-----------------------------------------------------------------
```

STAGS run 9: soccerball.bin9

```
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
 5.000E-02, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 5.000E-02, $ STEP(1) = load factor increment, System A
 0.900E+00, $ 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.
  50, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
 500,$ NSEC= number of CPU seconds before run termination
 12,$ 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.
 0, 0, 1  $ NPATH=0: Riks, NEIGS=no.of eigs, NSOL=1=discontin.ET-1
```

soccerball.out2.9 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
   50  0.000000E+00  0.000000E+00
   51  0.100000E+00  0.000000E+00
   52  0.163689E+00  0.000000E+00
   53  0.256911E+00  0.000000E+00
   54  0.389958E+00  0.000000E+00
   55  0.541449E+00  0.000000E+00
   56  0.644808E+00  0.000000E+00
   57  0.641826E+00  0.000000E+00
   58  0.627707E+00  0.000000E+00
   59  0.619127E+00  0.000000E+00
   60  0.614341E+00  0.000000E+00
   61  0.612071E+00  0.000000E+00
   62  0.609203E+00  0.000000E+00
   63  0.605332E+00  0.000000E+00
```

STAGS run 10: soccerball.bin10

```
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
 0.605332, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 1.0, $ STEP(1) = load factor increment, System A
 0.900E+00, $ 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.
  63, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
1000,$ NSEC= number of CPU seconds before run termination
 12,$ 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
```

soccerball.out2.10 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
   63  0.605332E+00  0.000000E+00
   64  0.598672E+00  0.000000E+00
   65  0.593294E+00  0.000000E+00
   66  0.589680E+00  0.000000E+00
   67  0.586570E+00  0.000000E+00
   68  0.583379E+00  0.000000E+00
   69  0.580204E+00  0.000000E+00
   70  0.577097E+00  0.000000E+00
   71  0.573107E+00  0.000000E+00
   72  0.569220E+00  0.000000E+00
   73  0.564709E+00  0.000000E+00
   74  0.560341E+00  0.000000E+00
   75  0.556172E+00  0.000000E+00
   76  0.551380E+00  0.000000E+00
   77  0.546807E+00  0.000000E+00
   78  0.542484E+00  0.000000E+00
   79  0.537624E+00  0.000000E+00
   80  0.533037E+00  0.000000E+00
   81  0.528772E+00  0.000000E+00
   82  0.524790E+00  0.000000E+00
   83  0.520276E+00  0.000000E+00
```

```
   84  0.516132E+00  0.000000E+00
-------------------------------------------------------------
```

STAGS run 11: soccerball.bin11

```
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
 0.389958, $ STLD(1) = starting load factor, System A. BEGIN C-1 rec.
 0.1, $ STEP(1) = load factor increment, System A
 0.900E+00, $ 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.
  54, $ ISTART=restart from ISTARTth load step.   BEGIN D-1 rec.
300,$ NSEC= number of CPU seconds before run termination
 12,$ 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
```

soccerball.out2.11 (abridged)

```
 LIST OF LOAD STEPS AND LOAD FACTORS
 STEP      PA            PB            PX
   54  0.389958E+00  0.000000E+00
   55  0.402634E+00  0.000000E+00
   56  0.421352E+00  0.000000E+00
   57  0.448757E+00  0.000000E+00
   58  0.488072E+00  0.000000E+00
   59  0.541756E+00  0.000000E+00
   60  0.604596E+00  0.000000E+00
   61  0.643652E+00  0.000000E+00
   62  0.647801E+00  0.000000E+00
   63  0.637047E+00  0.000000E+00
   64  0.625312E+00  0.000000E+00
   65  0.617439E+00  0.000000E+00
   66  0.613480E+00  0.000000E+00
=============================================================================
```