

Table 39 **Run stream** to produce the results for the **imperfect, isogrid-stiffened** equivalent ellipsoidal shell, which is the case called "egellipse.stiffened" in the directory, /home/progs/genopt/case/torisph.

The GENOPT case is run in the directory, /home/progs/genoptcase. (/home/progs = the directory where the GENOPT system is stored on the writer's computer).

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COMMAND	PURPOSE OF THE COMMAND	FILES	
		input	output
(PART 1 First generate results from GENOPT...)			
begin	establish the starting design	*.BEG	*.OPB
decide	choose decision variables, bounds	*.DEC	*.OPD
mainsetup	choose analysis type, strategy	*.OPT	-----
superopt	96-hour "batch" run.	*.OPT	*.OPP
	five OPTIMIZEs per AUTOCHANGE		
chooseplot	choose what to plot vs design iterations.	*.CPL	-----
diplot	get plot file, *.5.ps	various	*.5.ps
superopt	96-hour "batch" run.	*.OPT	*.OPP
	five OPTIMIZEs per AUTOCHANGE		
chooseplot	choose what to plot vs design iterations.	*.CPL	-----
diplot	get plot file, *.5.ps	various	*.5.ps
superopt	96-hour "batch" run.	*.OPT	*.OPP
	five OPTIMIZEs per AUTOCHANGE		
chooseplot	choose what to plot vs design iterations.	*.CPL	-----
diplot	get plot file, *.5.ps	various	*.5.ps
superopt	96-hour "batch" run.	*.OPT	*.OPP
	five OPTIMIZEs per AUTOCHANGE		
chooseplot	choose what to plot vs design iterations.	*.CPL	-----
diplot	get plot file, *.5.ps	various	*.5.ps
(The results from the last SUPEROPT run appear in Fig. 3)			
(In the *.OPT file, change NPRINT from 0 to 1 and ITYPE from 1 to 2, that is, analysis of fixed design).			
mainsetup	choose analysis type, strategy	*.OPT	-----
optimize	run fixed design analysis in the foreground - about 50 seconds	*.OPT	*.OPM

are required.

(The optimum design and margins, etc. are listed in the file, egellipse.stiffened.opm4 in the directory, ../genopt/case/torisph. See Table 33, in particular the two columns headed "isogrid-stiffened, imperfect", and see Tables 30 - 32. See Table a19 in the appendix.)

(Next, save the optimum design by using "CHANGE". This is always a good practice. Then, should you want to rerun the case without optimization but using the optimum design as a "starting" design, you can easily do this by first executing "BEGIN" immediately followed by an execution of "CHANGE" with use of the input file for "CHANGE", that is, the file called *.CHG. See Table 38.)

change	run the processor called "CHANGE"	*.CHG	*.OPC
	As input, provide the latest optimum design, in this case the design that is listed in the file, egellipse.stiffened.opm4 (see the previous table for the input data. See Table 38 for a list of *.CHG)		

(PART 2 Next, generate results from BIGBOSOR4 for the optimum design. See the footnote in Table 30 for more info...)

```
cp egellipse.ALL1 /home/progs/bigbosor4/work/egellipse.ALL
cd /home/progs/bigbosor4/work
bigbosor4log activate bigbosor4 command set      -----
bigbosorall  run bigbosor4 in foreground.         *.ALL      *.OUT
bosorplot    get plots of mode 1 and mode 2
              buckling of perfect, optimized
              isogrid-stiffened torispherical
              shell.
```

(The plots are in Figs. 4 (mode 1) and 5 (mode 2))

(PART 3 Results from STAGS FOR THE OPTIMUM DESIGN...)

(Please see the next table.)
