Table 32 Optimized imperfect isogrid-stiffened equivalent elliposidal shell. Design margins from Load Set 2 **(-mode 1 and -mode 2 imperfection shapes)** corresponding to the design optimized with the use of only mode 1 and mode 2 imperfection shapes. These margins are developed via the seven analyses of the type listed in Table 30. Critical margins are in **bold.**

A typical margin with the meanings of the indices, a, b, c, d, e, explained:

```
                    a                              b
8  4.979E-02  (SKNST1A(2,2)/SKNST1(2,2))/SKNST1F(2,2)-1; F.S.= 1.00
                  c  d e       c d e         c  d e
```

"SKNST" means "Skin effective stress"
a = "A" means "Allowable value"
b = "F" means "Factor of safety"
c = Imperfection mode number, (1 or 2 in the cases explored here)
d = Load set number (1 or 2 in the cases explored here)
Load set 1 means "use +mode 1 and +mode 2 imperfection shapes"
Load set 2 means "use -mode 1 and -mode 2 imperfection shapes"
e = Region number:
(1 or 2 Region 1 is from the axis of revolution to xlimit, that is, 0 < x < xlimit.
Region 2 is from xlimit to the equator, that is, xlimit < x < semi-major axis.)

*** RESULTS FOR LOAD SET NO. 2 (-mode 1 and -mode 2 imperfections) ***
MARGINS CORRESPONDING TO CURRENT DESIGN (F.S.= FACTOR OF SAFETY)

MARGIN NO.	CURRENT VALUE	DEFINITION
1	**2.455E-02**	**(CLAPS1(2)/CLAPS1A(2)) / CLAPS1F(2)-1; F.S.= 1.00**
2	5.860E-01	(GENBK1(2)/GENBK1A(2)) / GENBK1F(2)-1; F.S.= 1.00
3	2.168E+00	(SKNBK1(2,1)/SKNBK1A(2,1))/SKNBK1F(2,1)-1; F.S.= 1.00
4	2.298E+00	(SKNBK1(2,2)/SKNBK1A(2,2))/SKNBK1F(2,2)-1; F.S.= 1.00
5	**1.477E-01**	**(STFBK1(2,1)/STFBK1A(2,1))/STFBK1F(2,1)-1; F.S.= 1.00**
6	3.683E-01	(STFBK1(2,2)/STFBK1A(2,2))/STFBK1F(2,2)-1; F.S.= 1.00
7	**-4.325E-03**	**(SKNST1A(2,1)/SKNST1(2,1))/SKNST1F(2,1)-1; F.S.= 1.00**
8	**4.979E-02**	**(SKNST1A(2,2)/SKNST1(2,2))/SKNST1F(2,2)-1; F.S.= 1.00**
9	**2.005E-02**	**(STFST1A(2,1)/STFST1(2,1))/STFST1F(2,1)-1; F.S.= 1.00**
10	**-1.268E-02**	**(STFST1A(2,2)/STFST1(2,2))/STFST1F(2,2)-1; F.S.= 1.00**
11	3.043E-01	(WAPEX1A(2)/WAPEX1(2)) / WAPEX1F(2)-1; F.S.= 1.00
12	6.727E-01	(CLAPS2(2)/CLAPS2A(2)) / CLAPS2F(2)-1; F.S.= 1.00
13	1.151E+00	(GENBK2(2)/GENBK2A(2)) / GENBK2F(2)-1; F.S.= 1.00
14	1.790E+00	(SKNBK2(2,1)/SKNBK2A(2,1))/SKNBK2F(2,1)-1; F.S.= 1.00
15	1.791E+00	(SKNBK2(2,2)/SKNBK2A(2,2))/SKNBK2F(2,2)-1; F.S.= 1.00
16	**7.854E-02**	**(STFBK2(2,1)/STFBK2A(2,1))/STFBK2F(2,1)-1; F.S.= 1.00**
17	1.232E+00	(STFBK2(2,2)/STFBK2A(2,2))/STFBK2F(2,2)-1; F.S.= 1.00
18	**1.558E-01**	**(SKNST2A(2,1)/SKNST2(2,1))/SKNST2F(2,1)-1; F.S.= 1.00**
19	**1.423E-01**	**(SKNST2A(2,2)/SKNST2(2,2))/SKNST2F(2,2)-1; F.S.= 1.00**
20	**-1.639E-02**	**(STFST2A(2,1)/STFST2(2,1))/STFST2F(2,1)-1; F.S.= 1.00**
21	**-3.856E-02**	**(STFST2A(2,2)/STFST2(2,2))/STFST2F(2,2)-1; F.S.= 1.00**
22	5.771E-01	(WAPEX2A(2)/WAPEX2(2)) / WAPEX2F(2)-1; F.S.= 1.00