Table 75 Optimized "perfect" unstiffened equivalent elliposidal shell. Design margins from Load Set 1 (+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. Wimp = 0.0001 inch.

______ A typical margin with the meanings of the indices, a, b, c, d, e, explained: b а 1.752E-01 (SKNBK1(1,2)/SKNBK1A(1,2))/SKNBK1F(1,2)-1; F.S.= 1.00c d e c de c de "SKNBK" means "local skin buckling" 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 < x xlimit. Region 2 is from xlimit to the equator, *** RESULTS FOR LOAD SET NO. 1 (+mode 1 and +mode 2 imperfections) *** MARGINS CORRESPONDING TO CURRENT DESIGN (F.S. = FACTOR OF SAFETY) MARGIN CURRENT DEFINITION NO. VALUE 1 (CLAPS1(1)/CLAPS1A(1)) / CLAPS1F(1)-1; F.S.= -4.320E-02 2 (GENBK1(1)/GENBK1A(1)) / GENBK1F(1)-1; F.S.=-4.354E-02 (SKNBK1(1,1)/SKNBK1A(1,1))/SKNBK1F(1,1)-1; F.S.= 1.003 1.103E+00 (SKNBK1(1,2)/SKNBK1A(1,2))/SKNBK1F(1,2)-1; F.S.= 1.004 1.752E-01 (STFBK1(1,1)/STFBK1A(1,1))/STFBK1F(1,1)-1; F.S.= 1.005 2.131E+04 (STFBK1(1,2)/STFBK1A(1,2))/STFBK1F(1,2)-1; F.S.= 1.006 1.623E+04 (SKNST1A(1,1)/SKNST1(1,1))/SKNST1F(1,1)-1; F.S.= 1.007 2.410E-01 (SKNST1A(1,2)/SKNST1(1,2))/SKNST1F(1,2)-1; F.S.= 1.001.357E-02 8 9 1.006E+00 (STFST1A(1,1)/STFST1(1,1))/STFST1F(1,1)-1; F.S.= 1.00(STFST1A(1,2)/STFST1(1,2))/STFST1F(1,2)-1; F.S.= 1.00 10 5.281E-01 11 1.739E+00 (WAPEX1A(1)/WAPEX1(1)) / WAPEX1F(1)-1; F.S.= 12 (CLAPS2(1)/CLAPS2A(1)) / CLAPS2F(1)-1; F.S.= -4.236E-02 (GENBK2(1)/GENBK2A(1)) / GENBK2F(1)-1; F.S.= 13 -4.107E-02 (SKNBK2(1,1)/SKNBK2A(1,1))/SKNBK2F(1,1)-1; F.S.= 1.0014 1.103E+00 (SKNBK2(1,2)/SKNBK2A(1,2))/SKNBK2F(1,2)-1; F.S.= 1.0015 1.752E-01 (STFBK2(1,1)/STFBK2A(1,1))/STFBK2F(1,1)-1; F.S.= 1.0016 2.133E+04 (STFBK2(1,2)/STFBK2A(1,2))/STFBK2F(1,2)-1; F.S.= 1.0017 1.627E+04 18 2.463E-01 (SKNST2A(1,1)/SKNST2(1,1))/SKNST2F(1,1)-1; F.S.= 1.00(SKNST2A(1,2)/SKNST2(1,2))/SKNST2F(1,2)-1; F.S.= 1.0019 1.134E-02 20 1.008E+00 (STFST2A(1,1)/STFST2(1,1))/STFST2F(1,1)-1; F.S.= 1.0021 5.314E-01 (STFST2A(1,2)/STFST2(1,2))/STFST2F(1,2)-1; F.S.= 1.00

(WAPEX2A(1)/WAPEX2(1)) / WAPEX2F(1)-1; F.S.=

22

1.736E+00