Errors in Chapter 6:

Pg 274 11th line from the bottom:

Change the last word from "plane" to "plate".

Pg. 275, 4 lines from the top of the page:

"…carefully note ~~that the~~ which convention has been used when….

Eq 18, pg 278:

A "*z*" is missing; Equation should be:

$$\varepsilon_{p1} = z\,\kappa_{p1}$$

$$\varepsilon_{p2} = z\,\kappa_{p2}$$

Eq 19, pg 278:

An extraneous "z" appears; Equation should be:

$$\kappa_{p1}, \kappa_{p2} = \left[\frac{(\kappa_{xx} + \kappa_{yy})}{2} \pm \sqrt{\left(\frac{(\kappa_{xx} + \kappa_{yy})}{2} \right)^2 + \left(\frac{\kappa_{xy}}{2} \right)^2} \right]$$

Pg 280, 7 lines from the bottom of the page:

One of the letters that define a plane is incorrect. As printed, the incorrect sentence reads:

"For example, plane b-j-h-c has been *twisted* during deformation of the plate."

Letter "h" is incorrect. The corrected sentence reads:

"For example, plane b-j-k-c has been *twisted* during deformation of the plate."

Pg 286, caption for Figure 12:

Part c of the caption should be:

$$[0/30/-60/10/\overline{45}]_s$$

Pg 289, near bottom of the page:

The first calculation should read:

$$z_0 = -t/2 = -(0.00100m)/2 = -0.000500m$$

Pg 291, Table 1:

(a) The value for ε_{yy} listed in the second row should be -1450 (not -145).

(b) The matrix listed on the bottom of the page should read:

$$\left\{\begin{matrix}\varepsilon_{11}\\ \varepsilon_{22}\\ \gamma_{12}\end{matrix}\right\}\Bigg|_{z=z_0}^{ply1} = \left\{\begin{matrix}250\mu m/m\\ -1500\mu m/m\\ 1000\mu rad\end{matrix}\right\}\Bigg|_{z=z_0}^{ply1}$$

(that is, γ_{12} should not be divided by 2)

Pg 295:

The subscript used to identify the $[\overline{Q}]$ matrix that appears at the bottom of the page is missing a minus sign. The matrix should appear:

$$[\overline{Q}]_{-30^\circ \text{ plies}} = \begin{bmatrix} 107.6x10^9 & 26.06x10^9 & -48.3x10^9 \\ 26.06x10^9 & 27.22x10^9 & -21.52x10^9 \\ -48.3x10^9 & -21.52x10^9 & 36.05x10^9 \end{bmatrix} (Pa)$$

Pg 310, Eq (33b):

The second term involves B_{22} (not B_{12}). Equation (33b) should read:

$$M_{yy} = B_{21}\varepsilon^o_{xx} + B_{22}\varepsilon^o_{yy} + B_{26}\gamma^o_{xy} + D_{21}\kappa_{xx} + D_{22}\kappa_{yy} + D_{26}\kappa_{xy}$$

Pg. 314:

The numerical value of $\overline{Q}_{11}$ for ply 2 should be 170.9×10^9 (not 107.9×10^9).

Pg. 316,317:

The numerical value of D_{22} (which appears on pg 316 and within the $[ABD]$ matrix on pg 317) should be 0.4208 (not 2.513).

Pg. 330:

(a) Incorrect superscript and subscript; the moisture stress resultant should appear as:

$$N_{xx}^{M} = 8190 N/m$$

(not as $N_{xx}^{T} = 8190 N/M$)

(b) The first sentence that appears on the page, as well as the superscripts used in the summary of moisture stress and moment resultants, should be:

"The remaining ~~thermal~~ moisture stress and moment resultants are calculated in similar fashion, eventually resulting in:

$$\begin{Bmatrix} N_{xx}^{M} \\ N_{yy}^{M} \\ N_{xy}^{M} \\ M_{xx}^{M} \\ M_{yy}^{M} \\ M_{xy}^{M} \end{Bmatrix} = \begin{Bmatrix} 8190\ N/m \\ 8460\ N/m \\ -233\ N/m \\ 0.05\ N-m/m \\ -0.05\ N-m/m \\ 0.03\ N-m/m \end{Bmatrix}$$

pg 341:

1st sentence of section 7.4: change "7.4" to "7.3".

pg 342:

On the fourth line from the top of the page, the superscripts for the 3rd and 4th "M" terms should be "M" rather than "T".

Pg. 346, Step 4(b):

Thermal and moisture resultants are calculated using Eqs (41) and (42), respectively.

Pg. 347, Step 3(b):

Thermal and moisture resultants are calculated using Eqs (41) and (42), respectively.

Pg. 349, fourth line from bottom:
Incorrect subscripts appear in one term:

"…noting that by definition $N_{yy} = N_{xy} = M_{xx} = M_{yy} = M_{xy} = 0$, Eq (45) becomes…."

Pg 353, third line from the bottom:

Effective Poisson ratios in extension are incorrectly labeled using the symbol "η". The equality should read:

$$\bar{\nu}^{ex}_{xy} = \bar{\nu}^{ex}_{yx} \qquad \text{(not } \bar{\eta}^{ex}_{xy} = \bar{\eta}^{ex}_{yx}\text{)}$$

Pg 354, fifth line from the bottom:

Effective Poisson ratios in extension are incorrectly labeled using the symbol "η". The sentence should read:

"....effective extensional properties $\bar{E}^{ex}_{xx}$, $\bar{E}^{ex}_{yy}$, $\bar{\nu}^{ex}_{xy}$, and $\bar{\nu}^{ex}_{yx}$."

(NOT: "....effective extensional properties $\bar{E}^{ex}_{xx}$, $\bar{E}^{ex}_{yy}$, $\bar{\eta}^{ex}_{xy}$, and $\bar{\eta}^{ex}_{yx}$.")

Pg 355, tenth line from the top:

Effective Poisson ratios in flexure are incorrectly labeled using the symbol "η". The sentence should read:

"…laminate in flexure, denoted $\bar{E}^{fl}_{xx}$, $\bar{E}^{fl}_{yy}$, $\bar{\nu}^{fl}_{xy}$, and $\bar{\nu}^{fl}_{yx}$, can therefore...."

(NOT: "…laminate in flexure, denoted $\bar{E}^{fl}_{xx}$, $\bar{E}^{fl}_{yy}$, $\bar{\eta}^{fl}_{xy}$, and $\bar{\eta}^{fl}_{yx}$, can therefore....")

Pg 360, first line:

Thermal stress resultants are calculated using Eqs (41).

pg 361:

A sentence that appears on the 5th line of text from the bottom of text should read in part:

"Specifically, if all plies within the laminate are of the same material type, then…"

That is, insert "same" in this sentence.

Homework Problem 2 (pg 368):

The strain ε_{xx} measured by rosette 2 should be listed as $1000\mu in/in$ (not $1000 in/in$).

Homework Problems 8, 9, and 10 (pg 369):

(a) The stacking sequence should be: $[0/\mp 10/90]_s$

(b) The problem statement should read: "During service the structure must support a load of 1000 lb_f, and will experience a ~~change of~~ temperature of 150 $^\circ F$ in a dry environment."

Homework Problem 11 (pg 370):

Add the following to the problem statement:

"Assume an individual ply thickness of 0.005 in."

Homework Problem 13 (pg 370):

The phrase: "Note the following:" should not appear.

Homework Problems 19, 20, 21, and 22 (pg 372,373):

The following loads are applied:

$$N_{xx} = 30kN/m \qquad N_{yy} = -7kN/m \qquad N_{xy} = 0$$
$$M_{xx} = 10Nm/m \qquad M_{yy} = M_{xy} = 0$$