

ERRATA: Peter H Zipfel “Modeling and Simulation of Aerospace Vehicle Dynamics”, AIAA Educational Series, 2000. 2nd Printing, July 2003
--- As of 18 Oct 04, PHZ ---

| Page | | Erroneous | Correct |
|------|---|--|---|
| 32 | 2 nd eq. down | $\begin{bmatrix} y_1^A \\ y_1^A \\ y_1^A \end{bmatrix}$ | $\begin{bmatrix} y_1^A \\ y_2^A \\ y_3^A \end{bmatrix}$ |
| 65 | Last three equations Credit: Mark Smith | $[a_2]^B = \frac{[S_{AB}]^B [g]^B}{ S_{AB} g }$ $[a_3]^B = [A_1]^B [a_2]^B = - \frac{[S_{AB}]^B [S_{AB}]^B [g]^B}{ S_{AB} ^2 g }$ $[T]^{BA} = \begin{bmatrix} -\frac{[S_{AB}]^B}{ S_{AB} } & \frac{[S_{AB}]^B [g]^B}{ S_{AB} g } & -\frac{[S_{AB}]^B [S_{AB}]^B [g]^B}{ S_{AB} ^2 g } \end{bmatrix}$ | $[a_2]^B = \frac{[S_{AB}]^B [g]^B}{ [S_{AB}]^B [g]^B }$ $[a_3]^B = \dots = - \frac{[S_{AB}]^B [S_{AB}]^B [g]^B}{ S_{AB} [S_{AB}]^B [g]^B }$ $[T]^{BA} = \begin{bmatrix} \dots & \frac{[S_{AB}]^B [g]^B}{ [S_{AB}]^B [g]^B } & -\frac{[S_{AB}]^B [S_{AB}]^B [g]^B}{ S_{AB} [S_{AB}]^B [g]^B } \end{bmatrix}$ |
| 113 | 4 th line from bottom up | $D^R v_I^M$ | $D^R v_T^M$ |
| 142 | Ex. 5.1 | $\mathbf{p}_{\Sigma B_i}^I = \sum_k \mathbf{p}_{B_i}^I = \sum_k m_{B_i} \mathbf{v}_{B_i}^I = \dots$ | $\mathbf{p}_{\Sigma B_i}^R = \sum_k \mathbf{p}_{B_i}^R = \sum_k m_{B_i} \mathbf{v}_{B_i}^R = \dots$ |
| 147 | 2 nd Eq, 2 nd line | $= m^B D^{I_2} (D^{I_2} \mathbf{s}_{B_{I_2}}) + \boldsymbol{\Omega}^{I_2 I_1} (D^{I_2} \mathbf{s}_{B_{I_2}}) = \dots$ | $= m^B D^{I_2} (D^{I_2} \mathbf{s}_{B_{I_2}}) + m^B \boldsymbol{\Omega}^{I_2 I_1} (D^{I_2} \mathbf{s}_{B_{I_2}}) = \dots$ |
| 222 | Unnamed eq. after Eq.(7.21) Credit: M. Weiss | $D^I \mathbf{p}_B^I = \dots$ | $D^I \varepsilon \mathbf{p}_B^I = \dots$ |
| 270 | Eq. 8.20 | $C_L = C_{L_{\alpha 0}} + C_{L_{\alpha}} \alpha$ | $C_L = C_{L_{\alpha 0}} + C_{L_{\alpha}} \alpha$ |
| 280 | 1 st Eq. | $F_r = \frac{C_D S}{\cos \alpha} q_c$ | $F_r = \frac{C_D S}{\cos \alpha} \bar{q}_c$ |
| 346 | Fig. 9.45 Credit: M. Weiss | G1 Environment | G2 Environment |
| 462 | Line above Eq. 10.133 | ...the covariance σ_{xy}^2 | ...the covariance σ_{xy} |
| 462 | Eq. 10.133 | $\sigma_{xy}^2 = \frac{\sum_{i=1}^n (x_i - \mu_x)(y_i - \mu_y)}{n-1}$ | $\sigma_{xy} = \frac{\sum_{i=1}^n (x_i - \mu_x)(y_i - \mu_y)}{n-1}$ |
| 462 | 4 th Eq. | $\rho_{xy} = \frac{\sigma_x \sigma_y}{\sigma_{xy}}$ | $\rho_{xy} = \frac{\sigma_{xy}}{\sigma_x \sigma_y}$ |