

## Typo's in *Elements of Propulsion, Gas Turbines and Rockets* (1st Printing)

As of August 19, 2008

Page 22, four lines below Eq. (1.13) – Add dot over  $Q_{in}$

Page 54, Figure 1.42b, Unit of y axis – Change “lbf” to “klbf”

Page 55, Eq (1.59) – Change “ $m_i$ ” to “ $\dot{m}_i$ ”

Page 58, Problem 1.14(d), second line – Change “1bm” to “lbfm”

Page 71, Middle of page – Change “185 lb/s” to “185 lbfm/s”

Page 83, Table 2.1, Right end of 2<sup>nd</sup> line – Change “R, (ft · lbfm)” to “R, (ft · lbf)”

Page 85, Eqs (2.44) and (2.45) – Change denominator on right side of equal sign to “ $\rho_1$ ”

Page 93, Eqs (2.65) and (2.66) – Change  $V_2$  to  $V^2$

Page 99, Line below Eq. (2.69) – Change “(3.5)” to “(2.69)”

Page 101, Line below Eq. (2.73) – Change “(2.71) and (2.72)” to “(2.72) and (2.73)”

Page 102, Bottom of page – Change “0.883” to “0.833”

Page 103, Below Fig. 2.19 – Change “0.883” to “0.833”, twice

Page 104, Eq (2.76) – Add minus sign to front of exponent so exponent reads “ $-\frac{\gamma+1}{2(\gamma-1)}$ ”

Page 105, Eq (2.77) – Remove equal sign to left of square prentices

Page 109, Eq (2.88) – Change  $\frac{P_{ii}}{P_{ie}}$  to  $\frac{P_{ie}}{P_{ii}}$

Page 114, Eqs (2.105a) and (2.105b) – Change  $\frac{T_{ii}}{T_{ie}}$  to  $\frac{T_{ie}}{T_{ii}}$

Page 115, Line 6 below Eq. (2.107b) – Change “2.25” to “2.26”

Page 116, Line 4 in paragraph above Example Case 2.5 – Change  $T_{r^*} = T_t \tau_c$  to  $T_{r^*} = T_t / \tau_c$

Page 119, Line 3 from bottom of page – Change “ $t > 1$ ” to “ $\tau > 1$ ”

Page 127, Fig. 2.35, Lower limit on Mach scale – Change “1” to “0”

Page 138, Table 2.5, third column, second line – Change  $\frac{dR}{T_i}$  to  $\frac{dT_i}{T_i}$

Page 138, Table 2.5, Line 5 – Change  $\frac{dp}{p}$  to  $\frac{d\rho}{\rho}$

Page 144, Second line below Table 2.6 – Change “Fig. 2.41” to “Fig. 2.42”

Page 148, Fig. P2.3 – Change  $V_i$  to  $V_t$  and  $\beta_i$  to  $\beta_t$

Page 153, Prob. 2.33 – Change “Eq (3.14)” to “Eq (2.77)”

Page 157, Prob. 2.49(c) – Change  $A_t$  to  $A_1$

Page 159, Prob. 2.54 – Change “one mole of oxygen” to “one half mole of oxygen”

Page 202, Eq (3.41) – Add “ $\varepsilon =$ ” to left side of equation

Page 235, Last paragraph – Change “Fig. 4.1” to “Fig. 4.2”

Page 235, Third line from bottom – Change “ $F_{int} + F'_{ext}$ ” to “ $F_{ext} + F'_{ext}$ ”

Page 238, Fourth line from top – Change “Appendix E” to “GASTAB software”

Page 238, Middle of page, Step 1 – Change “Appendix E” to “GASTAB software”

Page 238, Middle of page, Step 2 – Change “Appendix E” to “GASTAB software”

Page 240, 2/3<sup>rd</sup> down page – Change “ $P_i$ ” to  $P_1$ ”

Page 243, Last paragraph, fifth line from bottom – Change “F” to “T”

Page 247, Third line – Change “schematic” to “sketch”

Page 264, Table 5.1 – Change  $\tau_f = \frac{P_{t13}}{P_{t2}}$  to  $\pi_f = \frac{P_{t13}}{P_{t2}}$

Page 337, Fig. 5.30 – Change label for horizontal axis from  $\pi_c$  to  $\alpha$

Page 345, Prob. 5.6 (c) – Change “thrust” to “specific thrust”

Page 346, Second line of Prob. 5.8 – Change “ $\eta_\varepsilon$ ” to “ $\eta_T$ ”

Page 348, Second line of Prob. 5.17 – Change “ $\pi_f$ ” to “ $\pi_f$ ”

Page 358, Fig. 6.3 – Change label for point 1 from “ $P_i$ ” to “ $P_1$ ”

Page 366, Third line of Example 6.1 – Change “Eq. (6.14)” to “Eq. (6.15)”

Page 377, Eq. 6.41 - Change “ $h_{r5i}$ ” to “ $h_{t5i}$ ”

Page 386, Eq. 7.20f – Change to read  $\pi_r = \tau_r^{\gamma_c / (\gamma_c - 1)}$

Page 386, Eq. 7.20o – Change to read  $\pi_t = \tau_r^{\gamma_t / [(\gamma_t - 1)e_t]}$

Page 387, Delete last line

Page 389, Top line – Change “ $T_c$ ” to “ $T_0$ ”

Page 429, Prob. 7.12 – Change  $c_{pt} = 1.004$  to  $c_{pc} = 1.004$

Page 441, Eq. (8.3) – Correct second “ $\dot{m}_{ci}$ ” to “ $\dot{m}_i$ ”

Page 455, Third line of Section 8.2.4 – Change “exit total pressure  $T_{t3}$ ” to “exit total temperature  $T_{t3}$ ”

Page 463, Figure 8.15, change label  $\frac{\dot{m}_c}{\dot{m}_{fcR}}$  in lower left to  $\frac{\dot{m}_{fc}}{\dot{m}_{fcR}}$

Page 463, Second equation – Correct to read  $\dot{m}_f = \frac{P_{t2}}{P_{t2R}} \sqrt{\frac{T_{t2}}{T_{t2R}}} \frac{\dot{m}_{fc}}{\dot{m}_{fcR}} \dot{m}_{fcR}$

Page 467, 80% down page, Component behavior: - change  $T_{dR}$  to  $\pi_{dR}$

Page 469, Example 8.3 – Change “ $T_{t4} = 1670^\circ \text{R}$ ” to “ $T_{t4} = 1670\text{K}$ ”

Page 527, Problem 8.15 – Change “ $T_{t4} = 3500^\circ \text{R}$ ” to “ $T_{t4} = 3600^\circ \text{R}$ ”

Page 528, Problem 8.16 – Change “ $3200^\circ \text{R}$ ” to “ $3535^\circ \text{R}$ ”

Page 546, Sixth line in Paragraph 9.3.2 – Change “(dashed vectors)” to “subscript R”

Page 548, Eq. (9.8) – Change subscript “ $A_i$ ” to “ $A_i$ ”

Page 841, Line 9, Change Problem number “**1.16**” to “**1.17**”

Page 841, Problem **2.1** – Change answer “2,970 lbf” to “2.97 lbf”

Page 842, Problem **4.1** – Change “kM” to “kN”