

Errata

These errata apply to Raymer's 4th Edition

- Page 31 In Box 3.1 replace "Table 2" with "Table 3.2" (three places). Replace "Table 1" with "Table 3.1".
- Page 31 In Box 3.1, replace " $W_f/W_0 = 1.06(1-0.635) = 0.3773$ " with " $W_f/W_0 = 1.06(1-0.6441) = 0.3773$ ".
- Page 83 In Figure 4.36, change "Desire 1/3 of rudder area to be unblanketed" to "Desire >1/3 of rudder area to be unblanketed".
- Page 99 In Figure 5.4, the curves marked "Balanced field length" (for aircraft with 2, 3, or 4 jet engines) represent FAR takeoff field and not balanced field length. These field lengths may, or may not, be the same. For these curves the value of $C_{L_{TO}}$ in the takeoff parameter (TOP) must be the maximum lift coefficient at takeoff conditions as used for stall calculation. For other aircraft types use the actual lift coefficient at takeoff, as described in the text.
- Page 116 In Eq. 6.16 for " ψ " in denominator, replace with " $\dot{\psi}$ ".
- Page 224 In Fig. 10.2 replace "profan" with "propfan".
- Page 313 In sixth paragraph, replace "fuselage life effects", with "fuselage lift effects".
- Page 316 In Fig. 12.9, replace " ΔY " with " Δy ".
- Page 318 In Fig. 12.9, replace " Δ_y " with " Δy ".
- Page 343 In Fig. 12.29, replace the centerline symbol on the x-axis with C_L .
- Page 379 In Eq. 13.10, replace " ρ_0 " with " ρ_{SL} ".
- Page 381 In Eq. 13.14, write Speed-Power Coefficient as $c_s = V^5 \sqrt{\frac{\rho}{Pn^2}}$.
- Page 383 In Fig. 13.12 " $\theta_{3/4}$ " is undefined. It is defined in Lan & Roskam Fig. 7.8 as the induced flow angle at the $3/4$ propeller radius.
- Page 473 For consistency with other equations, in Eq. (16.11) change C_{M_α} to C_{m_α} .
- Page 477 In Fig. 16.16, top right hand side, replace "f/c" with "t/c", where "t" is the airfoil thickness at the representative flap section. On horizontal axis, replace " C_f/c " with " c_f/c ".
- Page 478 The title to Fig. 16.7 should read "Empirical correction for plain flap lift increment (Ref. 37)".
- Page 482 In Fig. 16.12, replace " I_t " (two places) with " L_t " (distance from wing MAC quarter chord to horizontal stabilizer MAC quarter chord).

- Page 483 In sub-section titled “Fuselage and Nacelle Pitching Moment”, second line, replace “Eq. (16.23)” with “Eq. (16.25)”.
- Page 484 In Fig. 16.14 replace “ K_F ” with “ K_f ”. This is used in Eq. 16.25. Note that this is not the same correction factor as the K_F used in Eq. 16.48 and defined in Fig. 16.7.
- Page 495 At the start of Static Lateral-Directional Stability subsection, replace “The yaw and pitching-moment derivatives” with “The yaw and rolling-moment derivatives”.
- Page 495 In Fig. 16.20 the text above the solid line should read “NASA TN D-423”.
- Page 496 In Fig 16.21 replace “ $C_{l_{\beta_{wing}}}$ ” with “ $C_{l_{\beta_{wing}}}$ ”. Replace “ $\lambda_{c/4}$ ” with “ $\Lambda_{c/4}$ ”. Replace the figure title with “Fig 16.21 Effect of sweep, aspect ratio, and taper ratio on lateral-directional stability.”
- Page 497 In Eq. (16.47) replace the first term on the RHS on the equation with $\left(\frac{C_{l_{\beta_{wing}}}}{C_L}\right)$. This makes the term consistent with Fig. 16.21. $C_{l_{\beta_{wing}}}$ includes the effects of sweep, aspect ratio and taper ratio only, and should not be confused with $C_{l_{\beta_c}}$ which includes the effects of $C_{l_{\beta_{wing}}}$ plus effects of dihedral and vertical location on wing on fuselage.
- Page 504 In Fig. 16.26, replace vertical axis callout “ C_{l_p} ” with “ C_{l_p} ”. This is used in the denominator of Eq. 16.64.
- Page 530 In Figure 17.6 the units for the horizontal axis is undefined. It is velocity, V, in knots true air speed [KTAS].
- Page 543 Eq. (17.94) should read: $f_s = -\left(\frac{dh_e}{dW_f}\right) = -\frac{\frac{dh_e}{dt}}{\frac{dW_f}{dt}} = -\left(\frac{P_s}{CT}\right)$. It is necessary to be precise and treat fuel flow as a negative rate of change of aircraft weight with time (which it is) because this equation may be used to derive Eq. (19.8).
- Page 549 To be consistent with Fig. 17.18, replace S_T with S_{TR} in Eq. (17.109) and Eq. (17.111). In Eq. (17.111) replace h_{TR} with $h_{obstacle}$.
- Page 563 In Fig 18.1 in the equation for H at the top of the figure, replace “Q1” with “ Q_1 ”.
- Page 795-802 Installation loss assumptions are listed in each section, and it states that the data reflect these assumptions. The call-outs on the axes of the figures should therefore read “Installed thrust (lb)”.
- Page 801 In first line of text replace “uninstalled-engine data” with “installed-engine data”.
- Page 805 Some FAR Part 25 values and definitions were changed in 1996. To reflect these changes:
 In Table F.4, Turbine-Engine Aircraft: FAR 25, line “Third-segment”, replace “1.4” with “1.5”. Replace “1.5” with “1.7”.
 In line “Go-around in approach configuration”, change “ $\leq 1.5 V_S$ ” to “ $\leq 1.4 V_{SR}$ ”.
 In line “Go-around in landing configuration”, change “ $\leq 1.3 V_S$ ” to “ $\leq 1.23 V_{SR0}$ ”.