Design, Analysis and Research Corporation (DARcorporation)

ERRATA: Airplane Design Part V

Year of Print: 1999
(Revised August 22, 2019)

Please check the website www.darcorp.com for updated errata

page 43, Line 21 — Should read 'This corresponds to 473 kts at 35,000 ft or a dynamic pressure of 235 psf. At sea level, the corresponding value in KEAS is 263 kts. Since this is larger than 238 kts, V_C = 263 kts.'

page 43, Line 27 — Should read '$V_D = 1.25 \times V_C = 1.25 \times 263 = 329$ kts.'

page 45, Line 2 — 'Selene' should be 'Ourania'

page 54, Line 8 — 'V_C = 295 kts' should be 'V_C = 263 kts'

page 54, Line 8 — 'V_D = 369 kts' should be 'V_D = 329 kts'

page 61, Line 3 — 'Part III' should be 'Part IV'

page 71, Equation (5.13) — Should read: $$W_h = \frac{1.68\left(W_{TO}\right)^{0.567}\left(S_v\right)^{1.249}\left(A_v\right)^{0.482}}{639.95\left(t_{r_v}\right)^{0.747}\left(\cos\Lambda_{1/4_v}\right)^{0.882}}$$

page 74, Equation (5.20) — Should read:

$$W_v = K_v S_v \left[3.81 \frac{\left\{\left(S_v\right)^{0.2} V_D\right\}}{\left\{1{,}000\left(\cos\Lambda_{1/2_v}\right)^{1/2}\right\}} - 0.287 \right]$$

page 77, Line 20 — Should read 'l_h = distance from wing root c/4 to horizontal tail root c/4 in ft'

page 89, Equation (6.13) — Should read:

$$W_{per\ prop} = K_{prop1}\left(N_{bl}\right)^{0.391}\left\{\frac{\left(D_p\right)\left(P_{TO_{per\ prop}}\right)}{1{,}000}\right\}^{0.782}$$

page 90, Line 2 — Remove Line 2

page 90, Line 5 — Should read ' $P_{TO_{per\ prop}}$ is the required take-off power per propeller'

page 90, Line 6 — Remove Line 6

page 90, Equation (6.14) — Should read:

$$W_{per\ prop} = K_{prop2}\left\{D_p P_{TO_{per\ prop}} \left(N_{bl}\right)^{1/2}\right\}^{0.782}$$

page 91, Line 6 — Should read '= 6.55 lbs/gal for JP-4'

page 123, Line 20 — Should read 'Note: These books are all published by: Design, Analysis and Research Corporation, 1440 Wakarusa Drive, Suite 500, Lawrence, KS, 66049. Tel. (785) 832-0434'

page 125, Line 10 — Should read '4. Agricultural airplanes: Table A4.1.'

page 136, Table A4.1a — Row 48 should read

'Maximum Fuel Capacity 534 1177 300 661 1150 2535'

page 136, Table A4.1a — Row 49 should read

'Maximum Payload 1300 2866 900 1984 2100 4630'