

**ERRATA: Airplane Aerodynamics and Performance**

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- cover & title page* Dr. Lan is now a J.L. Constant Distinguished Professor instead of a Warren S. Bellows Distinguished Professor
- page 7, Eqn (1.14)* Should read:  $\frac{\rho}{\rho_1} = \left(\frac{P}{P_1}\right)\left(\frac{T_1}{T}\right) = \left(\frac{T}{T_1}\right)^{\left(-\frac{1}{\gamma}-1\right)}$ .
- page 7, Eqn (1.15)* Should read:  $\frac{T}{T_0} = 1 + \frac{ah}{T_0} = 1 - 6.875 \times 10^{-6} h$ .
- page 62, Eqn 3.25b*  $c_x = \frac{X}{qc} = \int_0^1 \left( c_{p_{lower}} - c_{p_{upper}} \right) d\left(\frac{z}{c}\right)$  should be  
 $c_x = \frac{X}{qc} = \int_0^1 \left( c_{p_{upper}} \frac{dz_{upper}}{dx} - c_{p_{lower}} \frac{dz_{lower}}{dx} \right) d\left(\frac{x}{c}\right)$
- page 86, Fig 3.27* Last Figure should be ‘g’ instead of ‘f’
- page 105, Fig 4.9*  $e = \frac{1}{\pi Ae}$  is replaced with  $\frac{1}{\pi Ae}$  in both the Figure and the caption.
- page 110, Line 3* FAR\*23 should be FAR 23
- page 111, Fig 4.13* Symbols for  $\lambda=0.5$  and  $\lambda=0.2$  should be reversed.
- page 129* 8<sup>th</sup> line of Section 4.7.3 should read: ‘A detailed discussion of these trim effects on conventional, pure canard and three-surface airplanes can be found in Ref. 4.10, .....’
- page 144, Figure 5.6b* S = 27.0 ft, replace “S” with “b”. b = 27.0 ft
- page 187,  
line 5 from bottom* Change (5.11) to (5.13).

- page 195, Problem 5.3 the term  $\frac{2C_{L_{\min \text{ drag}}^2}}{\pi Ae}$  replaces  $\frac{2C_{L_{\min \text{ drag}}}}{\pi Ae}$
- page 223, Eqn 6.12a and b s.f.c<sub>to</sub> should be s.f.c
- page 289,  
4<sup>th</sup> line from bottom Change “thank” with “than”
- page 316,  
2<sup>nd</sup> line from top Change (7.18) to (7.26)
- page 318, 1<sup>st</sup> line Change “near field” with “far field”
- page 319, last line Change “110.5” with “100.5”
- page 326, Fig 7.29 Y<sub>1</sub> should be measured from the X-axis, not the lower surface.
- page 361, Fig 8.20 3-view drawing of F-106 missing.
- page 375, Eqn (9.5)  $\cos \gamma \approx 1$  replaces  $\cos \gamma \approx 0$
- page 399, line 4  $C_L^{3/2}/C_D$  replaces  $C_D/C_L^{3/2}$
- page 404, Equation 9.68 integral limits should t<sub>1</sub> to t<sub>2</sub> instead of h<sub>1</sub> to h<sub>2</sub>
- page 409, line 7 should read: “...the time-to-climb can be evaluated...”
- page 421, Eqn (9.84) The factor of ‘0.567’ is good for British units only.
- page 423, Eqn (9.87) The factor of ‘-0.133’ is good for British units only.
- page 447, 3<sup>rd</sup> line 2<sup>nd</sup> paragraph “wing” should be “wind”
- page 450 Example 10.1 A = 2.02 and  $h/\bar{c} = 0.329$

page 467,  
2<sup>nd</sup> line of equation 10.48

left side of equation:  $\frac{1}{2a_{g_{ave \text{ at } V=V_{LOF}/\sqrt{2}}}} \left[ V_{LOF}^2 \pm 2V_w V_{LOF} - V_w^2 + 2V_w^2 \right] =$

right side of equation:  $\frac{1}{2a_{g_{ave \text{ at } V=V_{LOF}/\sqrt{2}}}} (V_{LOF} \pm V_w)^2 =$

<i>page 467, Eqn (10.48)</i>	replace the terms: $\frac{1}{2} a_{g_{\text{ave at } V=V_{LOF}/\sqrt{2}}}$ with $\frac{1}{2 a_{g_{\text{ave at } V=V_{LOF}/\sqrt{2}}}}$
<i>page 477, Fig 10.27</i>	For the Take-off Weight vs Balanced Field Length plot, the top curve is for Sea Level and the bottom curve is for an altitude of 8,000 ft.
<i>Line before 10.6.1.3</i>	$V_A$ should be $V_{SL}$ .
<i>page 509, 1<sup>st</sup> line of Section 11.1</i>	‘looses should be ‘loses’.
<i>page 517, lines 1-2</i>	Should read: “...maximum endurance occurs when flying...”
<i>page 569, 8<sup>th</sup> line from bottom</i>	Delete the repeated ‘is’.
<i>page 590, Fig 12.8</i>	The label “W=100,000 lbs” should be referenced to the middle curve.
<i>page 690</i>	y-axis label should be: “ $\Delta PNL$ ” not “PNL”
<i>page 691</i>	y-axis label should be: “ $\Delta PNL$ ” not “PNL”
<i>page 692</i>	y-axis label should be: “ $\Delta PNL$ ” not “PNL”
<i>page 693</i>	y-axis label should be: “ $\Delta PNL$ ” not “PNL”