Design, Analysis and Research Corporation (DARcorporation)

ERRATA: Airplane Design Part I

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line 6 from bottom	replace 1,000 nm with 1,000 sm
page 61, Table 2.19	Take-off and Landing: groundrun of less than 2,400 ft.
page 69, Eqn. (2.23)	$D = (W_{PL} + W_{CREW}) + W_{PL_{\exp}}$ Where $W_{p_{\exp}}$ is the weight of the expended payload. (i.e., Missiles, bombs, etc.)
page 98, line 8 from bottom	replace $C_{L_{TO_{\max}}}$ by $C_{L_{\max_{TO}}}$
page 106, line 2	replace four factors: with five factors:
page 115, Eqn. (3.18)	$V_A = 1.1 V_{s_{PA}}$
page 138, line 3 from bottom	Replace x0.85 by :1.1
page 150, Eqn. (3.32)	$RC_h = RC_0(1 - h / h_{abs})$
page 152, Eqn. (3.38)	$\sin\gamma = \frac{T}{W}\left[P_{dl} - \sqrt{P_{dl}^2 - P_{dl} + \left(1 + \left(\frac{L}{D}\right)^2\right)^{-1} \left(\frac{T}{W}\right)^{-2}} \right]$
page 186, Section 3.7.4.2 *line 3*	...groundrun as < 2,400 ft.
line 7	S_L = 1.9 x 2,400 = = 4,560 ft.
From Figure 3.16	S_L = 4,500/0.6 = 7,600 ft.
From Figure 3.17 this yields:	V_A^2 = 25,000 kts^2.

$V_A = \left\{21{,}200(1.3/1.2)^2\right\}^{1/2} = 158\,kts$ should be

$V_A = \{25{,}000\}^{1/2} = 158\,kts$