

5/16/13

Errata for D. Raymer's

Aircraft Design: A Conceptual Approach 5th edition, first printing



Pg 74, Fig 4.16 title: Wing Sweep...letter "A" should be Greek Lambda (Λ), and there is supposed to be an equation at the bottom:

$$\tan \Lambda_{LE} = \tan \Lambda_{c/4} + \frac{1 - \lambda}{A(1 + \lambda)}$$

For a vertical tail, first double the Aspect Ratio (A).

Pg 118 missing quotation: However, the engine companies for such airplanes don't sell "thrust," they sell "power."

Pg 159 Fig 6.2: b_w = wing **span** (not "area")

Pg 346 - capitalize Space Shuttle

Pg 448 4th paragraph equation ref is wrong:

For preliminary wave drag analysis at $M \geq 1.2$, without use of a computer, a correlation to the Sears–Haack body wave drag is presented in Eq. (**12.45**), where the Sears–Haack **wave drag** D/q is from Eq. (**12.44**).

Pg 452 2nd paragraph equation ref is wrong:

The drag at and above Mach 1.2 (labeled A in the figure) is determined using Eq. (**12.45**) (divided by wing reference area).

Pg 453 1st paragraph equation ref is wrong - should be: When calculating the Sears–Haack D/q for Eq. (**12.44**),

Pg 457, first paragraph, first sentence:

"For aspect ratios between" should be "For sweeps between"

Pages 821-856 - On every page the top header has **Aircraft** misspelled

Below insertions are to clarify some of those pesky Weights equations

Pg 591 bottom- add text: A = aspect ratio (**equations use subscript “t” or “h” for horizontal tail, “v” for vertical tail**)

Pg 592 - revise : L_{cc} = **routing distance** -length from engine front to cockpit—total if multi-engine, ft

Pg 593: add: L_{sh} = length of engine **cooling** shroud, ft

Pg 593 - revise : N_f = number of **separate** functions performed by **surface** controls, **including rudder, aileron, elevator, flaps, spoiler, and speed brakes** (typically 4–7)

Pg 593 - revise : N_m = **number of surface controls driven by mechanical actuation instead of hydraulics (must be $\leq N_f$ and is typically 0–3)**