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: \(b_w = \text{wing span (not “area”)}\)

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: $A = \text{aspect ratio}$ (equations use subscript “t” or “h” for horizontal tail, “v” for vertical tail)

Pg 592 - revise: $L_{ec} = \text{routing distance}$—length from engine front to cockpit—total if multi-engine, ft

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

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

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