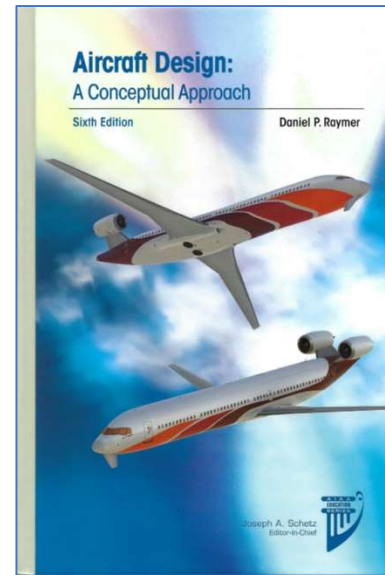


2/23/21

Errata for Dan Raymer's

**Aircraft Design:
A Conceptual Approach**
6th edition, first printing



Pg 91, the reference to Forward Swept Wings should say Chapter 23 (not 22)

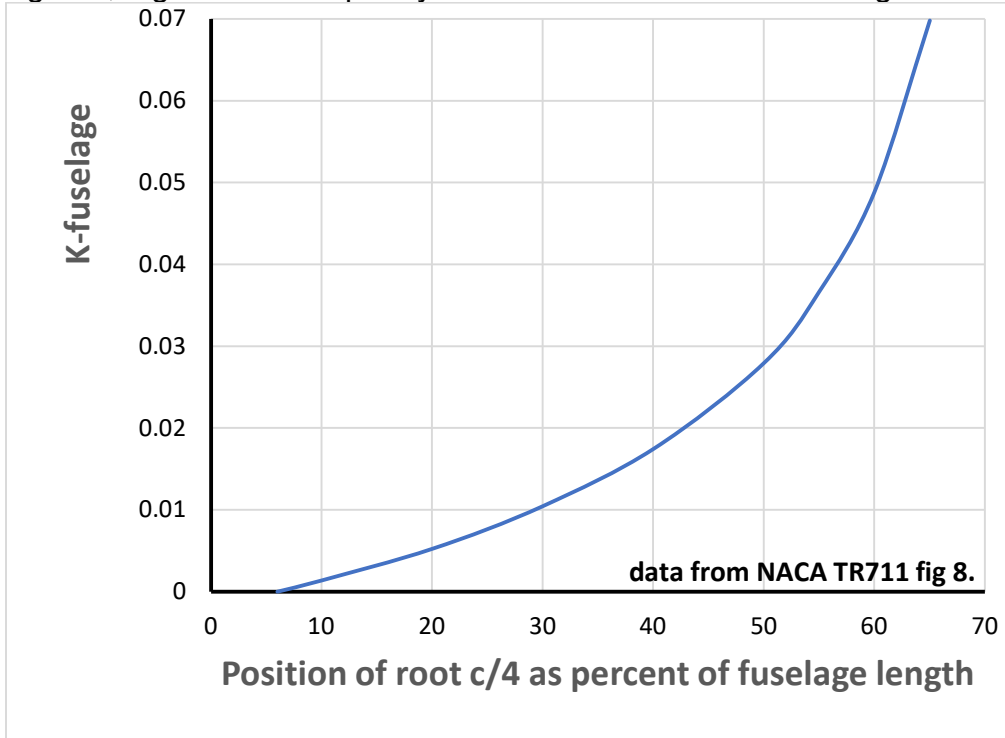
Pg 421 Table 12.5 has a missing digit in the last row:

Smooth molded composite	0.17	0.052
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Pg 572, eq. 15.1 typo: exponent missing for t/c, should be $(t/c)^{-0.4}$

Pg 576, eq. 15.47 does NOT contain a typo. The horizontal tail exponent for taper ratio really is negative (-0.02), despite implying that tail weight slightly increases as taper ratio reduces (ie., amount of taper is increased). Normally one would expect greater taper to reduce the weight because the root chord becomes longer and deeper. This sort of thing occasionally happens with statistical regression analysis, probably due to some co-related third factor. The development of these equations can be seen in the original reports, available at <http://www.aircraftdesign.com/WtsRpts.html>.

Pg 604, Figure 16.14 is poorly traced. Please use the following:



Pg 626, Fig 16.26, the C_{lp} damping terms estimated with this figure need to be multiplied by $(b/2V)$ before being used in equation 16.64.

Pg 1003, Chapter 12 should read:

Wing: $\Lambda (=C_t/C_r) = 0.6 C_t/C_r$

HorTail: $\Lambda (=C_t/C_r) = 0.57 C_t/C_r$

Pg 1004, Q 12.5: There is one wing parameter that looks “off” to experienced aircraft designers. This was deliberate, to stimulate discussion and exaggerate the effects of Mach. If you were designing this airplane for a cruise Mach of 0.85, what single change would you recommend to the wing parameters? Why? Recalculate MDD after your proposed change.