



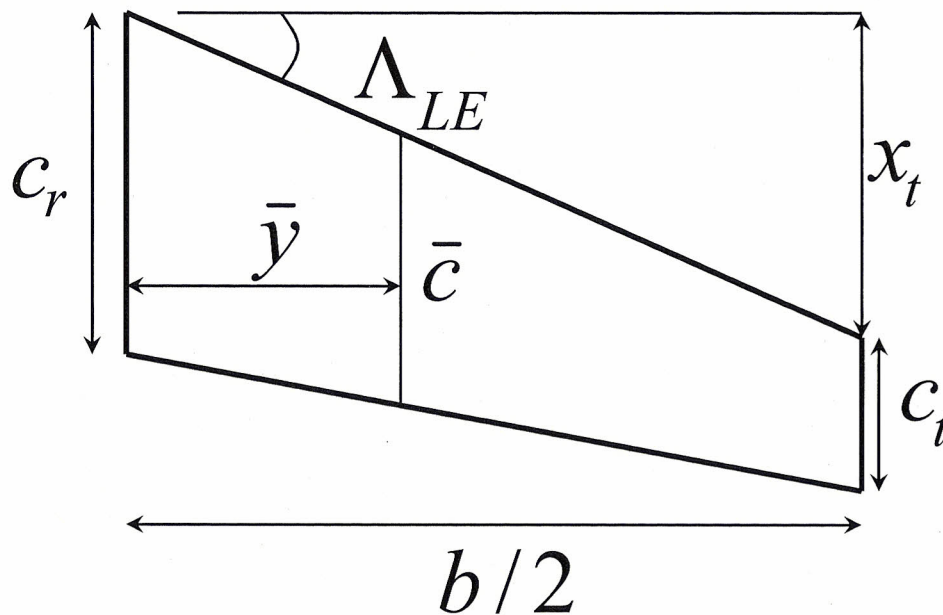
See pg. 302 - 303!

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Sen 442 LS, Side 11



Wing Geometry

For straight tapered wing surfaces



$$AR = b^2 / S$$

Aspect ratio

$$\lambda = c_t / c_r$$

Taper ratio

$$S = \frac{b}{2} (c_t + c_r)$$

Planform area

$$\bar{c} = \frac{2}{3} c_r \left(\frac{\lambda^2 + \lambda + 1}{\lambda + 1} \right)$$

Mean cord

$$\bar{y} = \frac{b}{6} \left(\frac{1 + 2\lambda}{1 + \lambda} \right)$$

$$x_t = \frac{b}{2} \tan \Lambda_{c/4} + \left(\frac{c_r - c_t}{4} \right)$$

Tip position