



- $S$  = Reference wing area
- $C$  = Chord (distance L.E. to T.E.)
- $A$  = Aspect ratio =  $b^2/S$
- $t/c$  = Airfoil thickness ratio (maximum thickness/chord)
- $\lambda$  = Taper ratio =  $C_{\text{tip}}/C_{\text{root}}$
- $b$  = Span

Given:  $W/S, A, \lambda$

$$S = W/(W/S) \quad b = \sqrt{A \cdot S} \quad C_{\text{root}} = 2 \cdot S/[b(1 + \lambda)] \quad C_{\text{tip}} = \lambda \cdot C_{\text{root}}$$

**Fig. 4.15 Wing geometry.**