



# PADA Design

## Comp Requirements

- 11b
- Current avionics
- Powered
- Weight
- Autonomous
- Current avionics
- Delivery
- GTV
- PADA is the GTV
- Weights

## Me Requirements

- Maximum wing area
- Flying wing
- GTV Fuselage
- Avionics in fuselage
- <sup>squishy</sup> GPS in wing
- Servos in wing

# Your requirements

- Reflexed airfoil

- Thickness  $> 12\%$

- Struxx

- Manufacturing

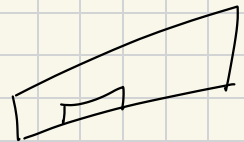
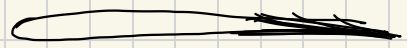
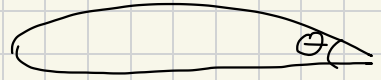
- Avionics

- Control surfaces

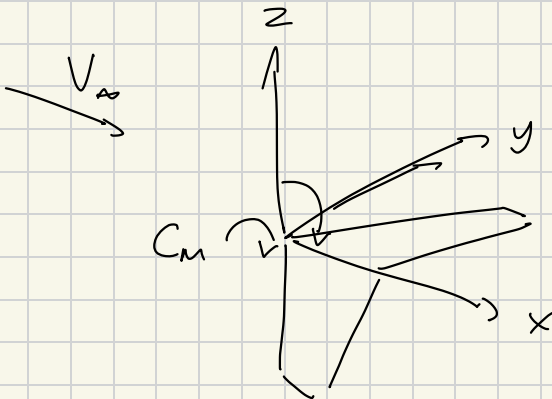
- No tail  $\rightarrow$  no rudder

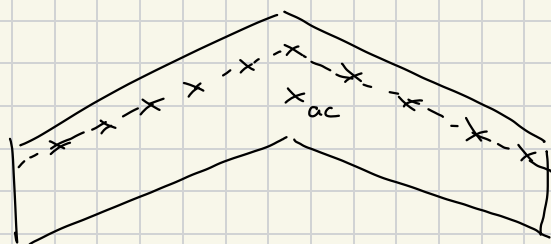
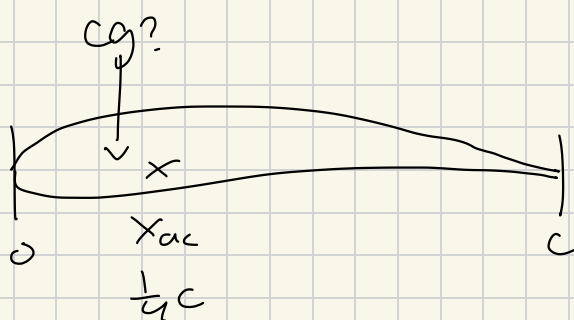
- Elevons

- Stability

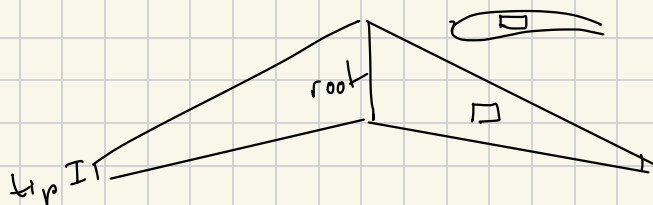


$$C_{m\alpha} \Rightarrow \frac{dC_m}{d\alpha} < 0$$

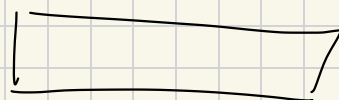
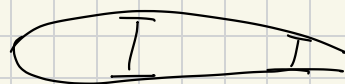
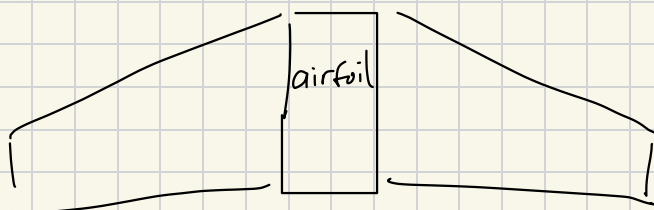




What else to change



taper ratio  $\frac{\text{tip}}{\text{root}}$



Todo