Tail sizing methods

Horizontal Tail

Class I Method

    Horizontal tail volume coefficients (see Raymer or Roskam for historical data)

Another Class I Method

    Longitudinal X-Plot

Class 2 Method

CAP Method of Mark Peters (see handout)

Vertical tail

Class I Method

    Vertical tail volume coefficient (see Raymer or Roskam for historical data)

Class I Method

    Lateral Directional X-Plot

V-Tails

Area Rules from Raymer and use Horizontal and vertical rules above

Control Surface Sizing Methods

Elevator

Class 1 method- area ratio (see Raymer or Roskam for historical data)

Rudder

Class 1 method- area ratio (see Raymer or Roskam for historical data)

Aileron

Class 1 method- area ratio (see Raymer or Roskam for historical data)

Class 2 Method – See work of Brian Roth on Control Power (see handout to come)