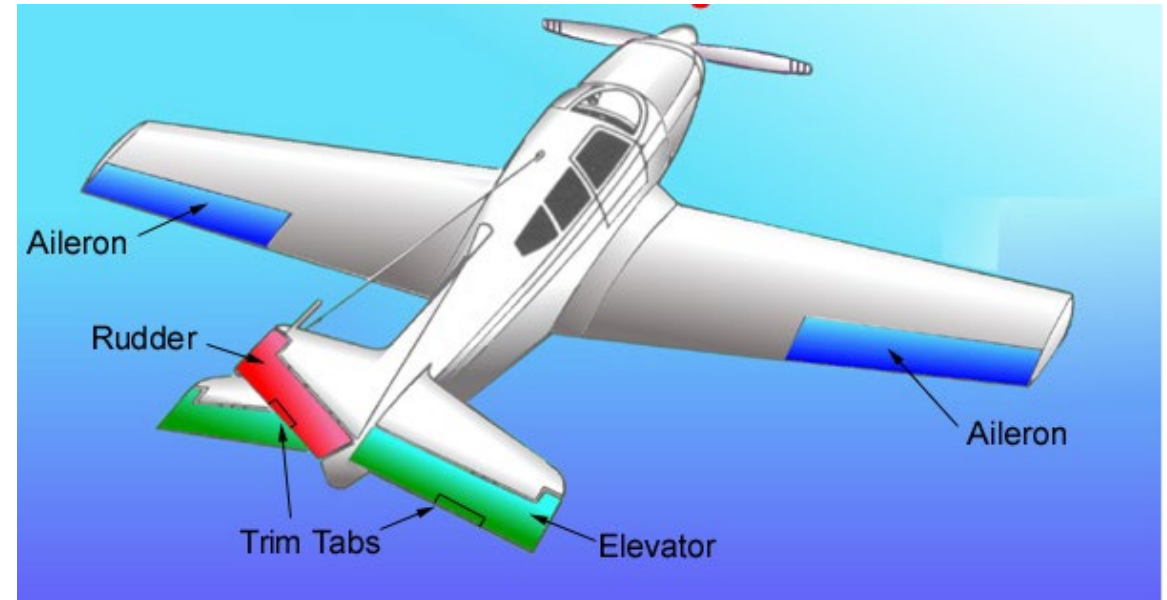
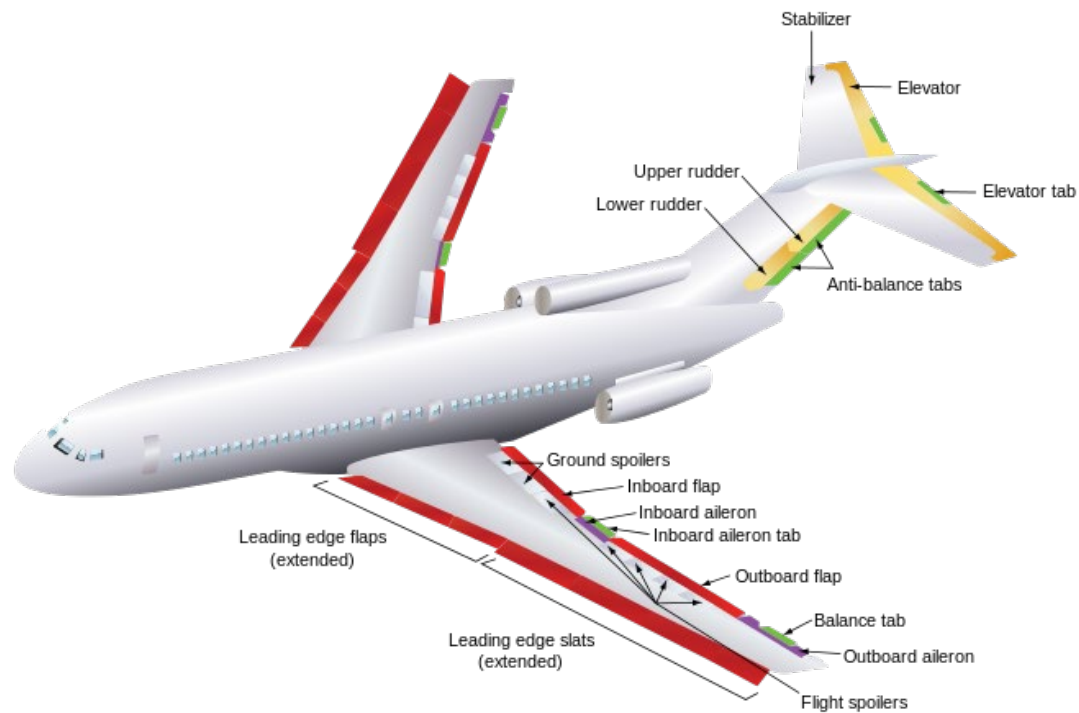


# Airplane Flight Controls



# First Some Diagrams



# On the Ground

Throttle for speed

Taxi at 'wake speed'

Yoke or stick => Nothing except to counter act the wind

Left rudder pedal => Plane moves left

Right rudder pedal => Plane moves right

# In the Air

Move the stick right or the yoke clockwise => Plane rolls clockwise

Move the stick left or the yoke counterclockwise => Plane rolls counterclockwise

Move the stick or yoke forward => Plane itches down

Nose down => Airspeed needle down

Move the stick or yoke toward you => Plane itches up

Left rudder pedal => Plane's nose moves left

Right rudder pedal => Plane's nose moves right

# Pitch for Airspeed

Plane itches down => Goes faster

Plane itches up => Goes slower

Think about driving on level road then up or down a hill

...without changing the gas pedal

In the plane you 'control the hill'

If the airspeed is 90 knots and we desire 75 knots what do you do?

If the airspeed is 60 knots and we desire 75 knots what do you do?

# The Recipe for Turns

When flying, you must **combine** the ailerons and rudder pedals to have a coordinated turn.

Roll right + right yaw => Plane banks to the right

Roll left + left yaw => Plane banks to the left

# Flaps

Increase lift to assist in flying slower

Increase drag to help reduce airspeed

Increase decent angle without increasing the airspeed

Flaps change:

Chord line

Angle of attack

Camber/Mean camber

Lift and Drag

## Flaps Down - Camber

Camber Line





Any questions I can answer or  
follow up later on?