

Center of Gravity

The center of gravity is the point in any solid where a single applied force could support it; the point where the object is equally balanced.

To find your RivKit's C.G. (center-of-gravity), tie a thread around the top of the canopy and move it fore and aft until the plane balances. →

An airplane in flight is controlled by the pilot using the yoke or control stick and the rudder pedals to move the control surfaces; the ailerons, elevators, and rudder. Moving the control surfaces change the forces that rotate the aircraft about a point called the center of gravity.



the pilot's foot pedals control the **rudder** changes **yaw**



yoke



control stick



Rotating the yoke or moving the control stick left or right moves the ailerons up and down. The ailerons, on the wing's outside trailing edge, move opposite of one another. A down aileron lifts the wing while the opposite aileron moves upward to lower the wing. The aileron movements roll the airplane and allow wing to lift the airplane left or right, producing a turn or change in direction.

the pilot's the yoke or stick controls the **ailerons**

changes **roll**

the pilot's the yoke or stick controls the **elevators** changes **pitch**

Moving the yoke or control stick forward and aft moves the elevators up and down, changing the pitch of the airplane, making it descend or climb.