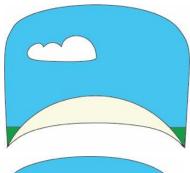


Our first couple of Lessons will focus on basic flows, rhythms, configuration changes and corresponding pitch attitudes.

We begin the process by developing muscle memory regarding 1 switch, 3 knobs, 1 lever, 1 wheel, and the Yoke. We use these controls to configure the aircraft for climbs, level offs to cruise, controlled slow descents for approaches, a smooth upward pitch for the level deceleration just above the runway and a subsequent Go Around. We do that at altitude with huge margins of safety and altitude.

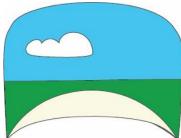
As we gain more comfort and familiarity, we will be able to correlate these configuration changes with some airspeeds that verify that we are getting the best performance out of the plane and that we are configured properly for the condition at hand. i.e. climb, cruise, approach, go around.



#### Climb....

When we climb at full power, with the proper pitch well above the horizon, and flaps 0° the airspeed will be 67 knots.

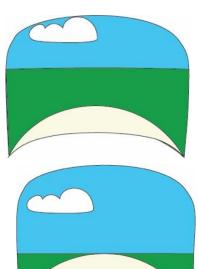
If it's not we will verify our pitch, our power is max, and that flaps are 0°.



### Cruise....

When we level off we will verify that our altitude is level, no climbs, no descents, power 2440 rpm, and we are 100 kts, flaps  $0^{\circ}$ 

If not, we double check our pitch, Power is 2440 and flaps are  $0^{\circ}$ 



# Approach....

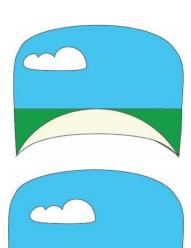
When we configure for approach, power will be 1500rpm, flaps will be  $30^{\circ}$ . the horizon will be halfway up the windshield, airspeed will be 65kts.

If it's not, we check our pitch, our power is 1500, and flap setting is 30°.



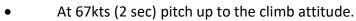
We will then choose the next 500ft increment below and pretend like we are landing at that altitude.

- We will reduce power to idle.
- pitch to the horizon and hold it there.
- @40 kts we initiate the go-around maneuver.



#### Go Around.....

- Full throttle
- Carburetor heat cold(off/in)
- Nose on the horizon
- Flaps 20°
- @55 kts (2 sec)
- Retract flaps slowly



Level off at original altitude and begin the cycle all over again.



# Trim technique....

There are several ways to wrap your head around this....

- The aircraft wants to follow the trim wheel.
- The only part of the trim wheel that is visible (accessible) is the aft part of the wheel.
- If you rotate the aft portion of the wheel up the tail will go up and the nose down.
- If you rotate the aft part of the wheel down the tail will go down and the nose up.

#### In other words:

- Rotating wheel down is nose up, tail down trim.
- Rotating the wheel up is nose down, tail up trim.

Finally rotating the... (this is how its described by the majority of aviation)

- Trim wheel Down is nose up trim
- Trim wheel Up is nose down trim

## Finally...

For practical purposes you will only operate carb heat, throttle, flaps and trim. But it's important to clear the area, verify landing light and mixture every time.

Approaches start with clearing the area...

- "area clear", radio calls
- landing light should be verified off or on,
- carburetor heat on (carburetor heat off below the green arc (1800rpm))
- power set as required usually 1500,
- mixture rich, (verify it's in)
- flaps incrementally 10, 20, 30 degrees.
- Trim

# Next...

We are going repetitively go through this over and over until you can do the following without my talking you through it.....

- Climb Va 67kts
- Cruise 100kts 2440rpm
- Approach... flaps 30°, 65kts, with various power settings (1500 rpm, 2000rpm, idle,)(next lesson we'll probably will only use 1500rpm)
- Landing flare... idle, flaps 30°
- Go Around

This process gets you ready to come out of altitude and approach a runway and do a go around with confidence without scaring yourself. More importantly without scaring your copilot (instructor).