

# **EXERCISE 1-AIRCRAFT FAMILIARISATION/2-PREPARATION FOR FLT/5 TAXYING**

**AIM:**

**WHY:**

**HOW:** Use of checklist/taxy 4 t/o & land, Rudder-nose, b4 turning-wing tips/propwash,




***INERTIA-FRICTION-SLOPE-SPEED – THROTTLE -BRAKES***

## EXERCISE 4 – EFFECTS OF CONTROL

**AIM:**

**WHY:**

**HOW:**

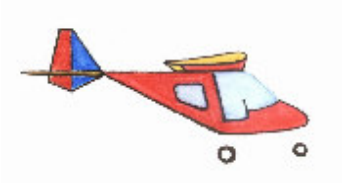
CONTROL		EFFECT	FURTHER EFFECT
ELEVATOR		PITCH	AIRSPEED CHANGE
AILERON		ROLL	YAW
RUDDER		YAW	ROLL

## **HORIZON TO ASSESS ATTITUDE**

**POWER – INCREASE – ACCELERATION – NOSE UP- CLIMB**  
**DECREASE – DECELERATE – NOSE DOWN - DESCEND**

**TRIM**

**PASSAGE OF CONTROL- I HAVE CONTROL OR YOU HAVE CONTROL**



## **EXERCISE 6 – STRAIGHT & LEVEL FLIGHT**

**AIM:**

**WHY:** A2B,Eco,Late

**HOW:**

### **1. STRAIGHT**

- ✓ Rudder + Stick Co-ordination
- ✓ Balance (kick the ball)
- ✓ Regaining
- ✓ Flying with drift (Practice)

### **2. LEVEL**

- ✓ Attitude
- ✓ Instruments (lookout & Scan)
- ✓ Adjust power (Practice)

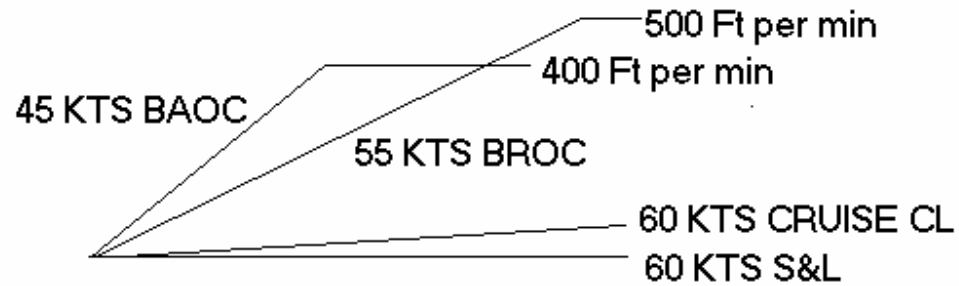
### **3. STRAIGHT & LEVEL PRACTICE**

**4. VARYING AIRSPEEDS** Power-Attitude-Adjust-Trim SLOW 45KTS  
FAST 65 KTS

## EXERCISE 7 – CLIMBING

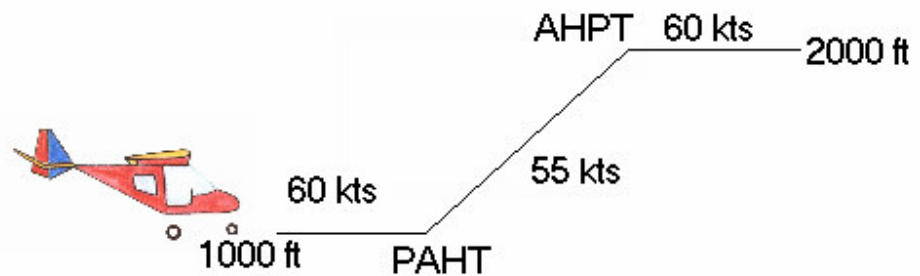
**AIM:**

**WHY:**



**HOW:**

1. **CRUISE CLIMB**
2. **BAOC - TEMPERATURE**
3. **BROC - TEMPERATURE**

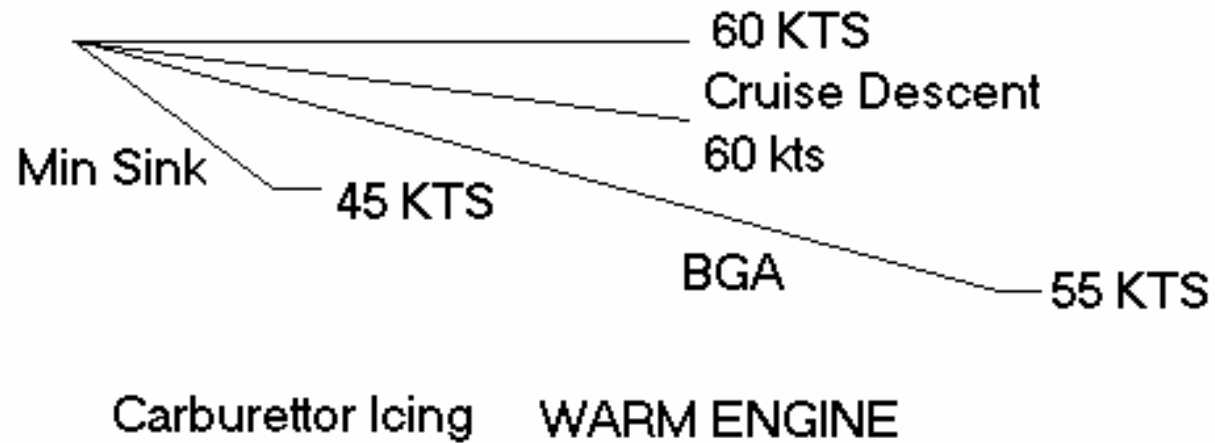


## EXERCISE 8 - DESCENDING

**AIM:**

**WHY: CRUISE DESCENT**

**HOW:**



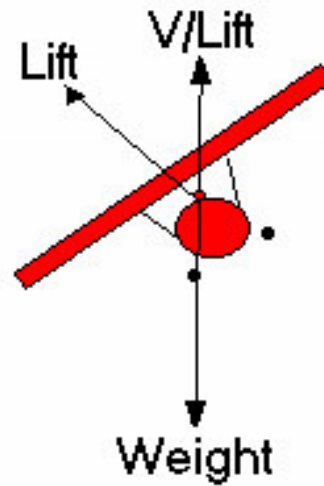
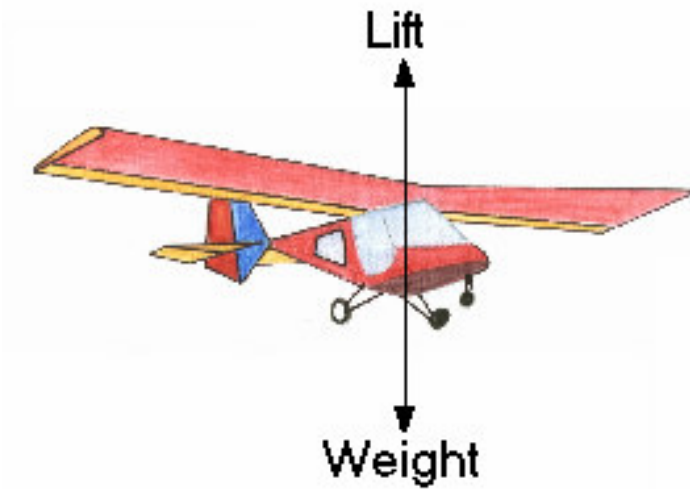
Practice Go-Around



## EXERCISE 9a – MEDIUM LEVEL TURNS

**AIM:**

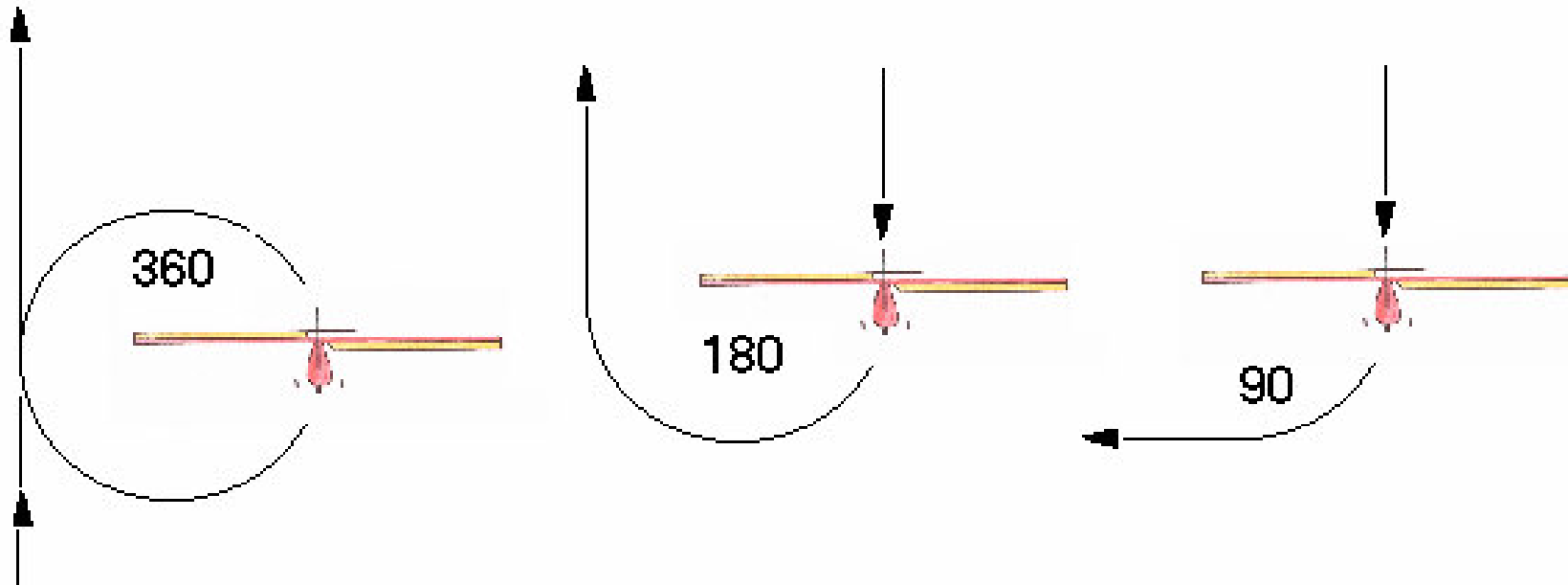
**WHY:** Enroute turn points, in circuit, hold position



- HOW:**
- 1. 360 onto a ground object**
  - 2. Stick & Rudder co-ordination – Recognise Bank**
  - 3. During Turn**

- ✓ **Airspace**
- ✓ **Angle of Bank**
- ✓ **Attitude**
- ✓ **Airspeed**
- ✓ **Altimeter**
- ✓ **Adjust**

- 4. Anticipate – Roll out – Stick & Rudder**





## EXERCISE 9b – CLIMBING & DESCENDING TURNS

**AIM:**

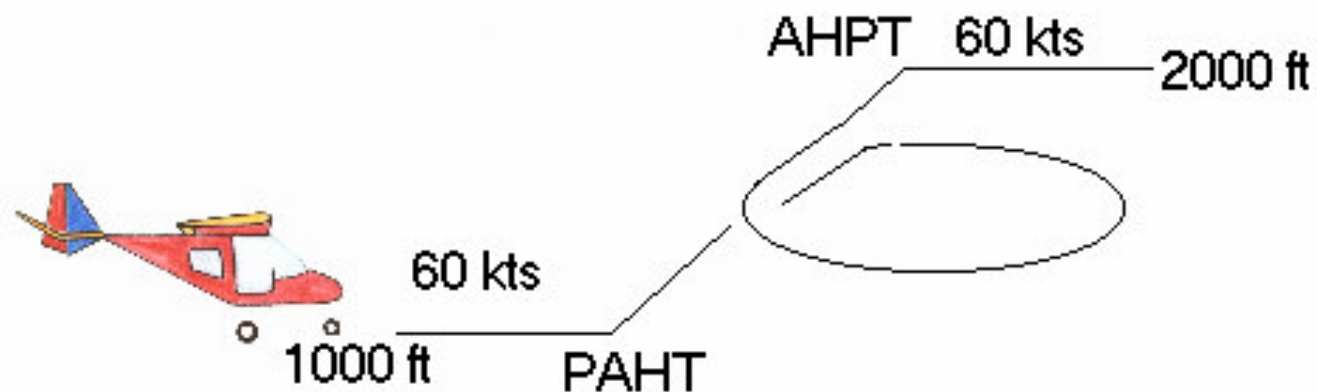
**WHY:**

**THEORY POINTS:**

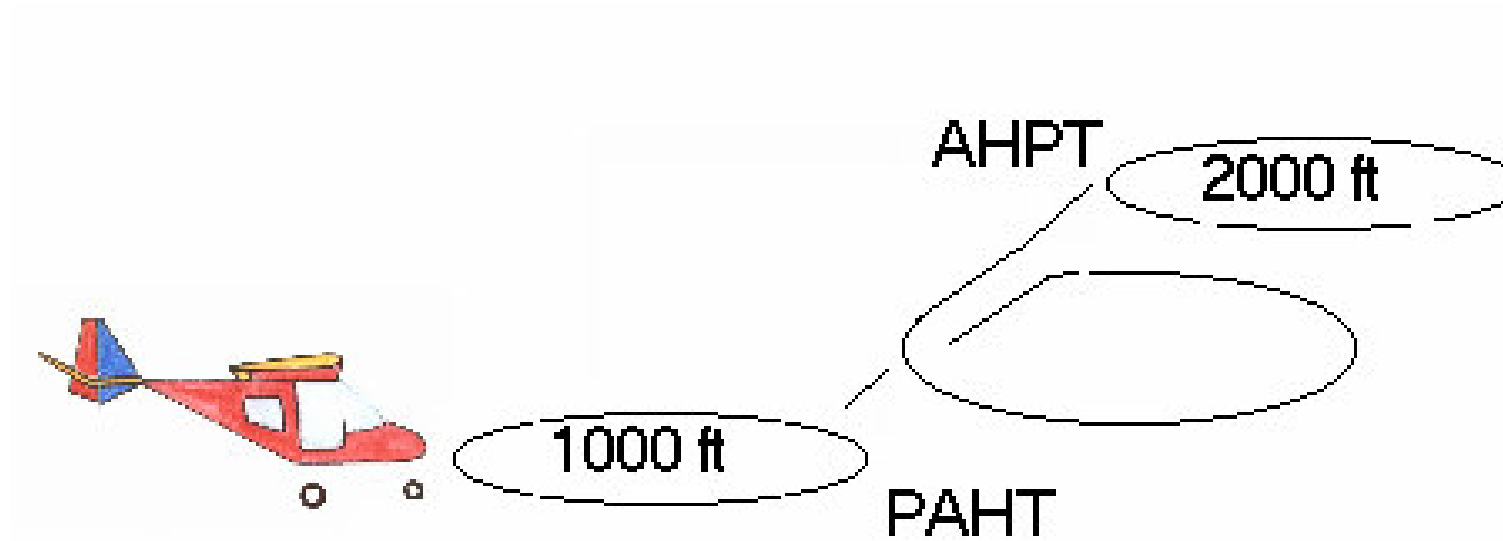
- ✓ Banking reduces ROC/ increases ROD
- Therefore Shallow Bank
- ✓ Helix Effect

**HOW:**

1. S&L – S CL – CL TURN – S CL – S&L



## 2. LV TURN – CL TURN – LV TURN



**Ditto Descending**

**AIRMANSHIP**

**CLIMBING HOT ENGINE & LOOKOUT**

**DESCENDING CARBURETTOR ICING & LOOKOUT**

## EXERCISE 10a – SLOW FLIGHT

**AIM:**

**WHY:** In every flight during TAKE OFF / slow. Recognise behaviour

Slow Flight	(10 a)	Incepiant	Stall	(10b)	Developed Stall
<b>Controls</b>					
<b>Attitude</b>					
<b>ASI &amp; Stick</b>					

**HOW:**

- ✓ NORMAL ATTITUDES + INDICATIONS
- ✓ SLOW FLIGHT + RECOVERY

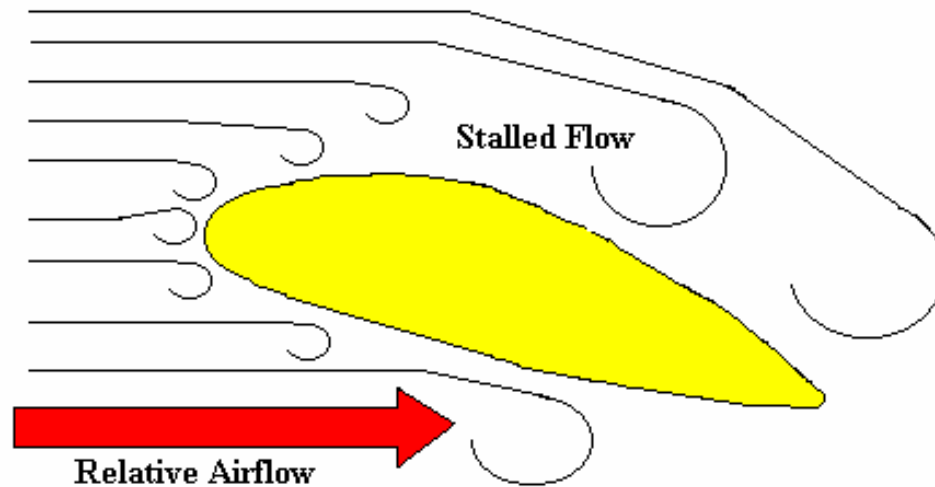
**AIRMANSHIP – HASELL AVOID –LARGE AILERON / JERKY MOVEMENTS**

## EXERCISE 10b – STALLING

**AIM:**

**WHY:** Too slow, pitch up abruptly, wind shear, turn too low speed, engine fails in steep climb

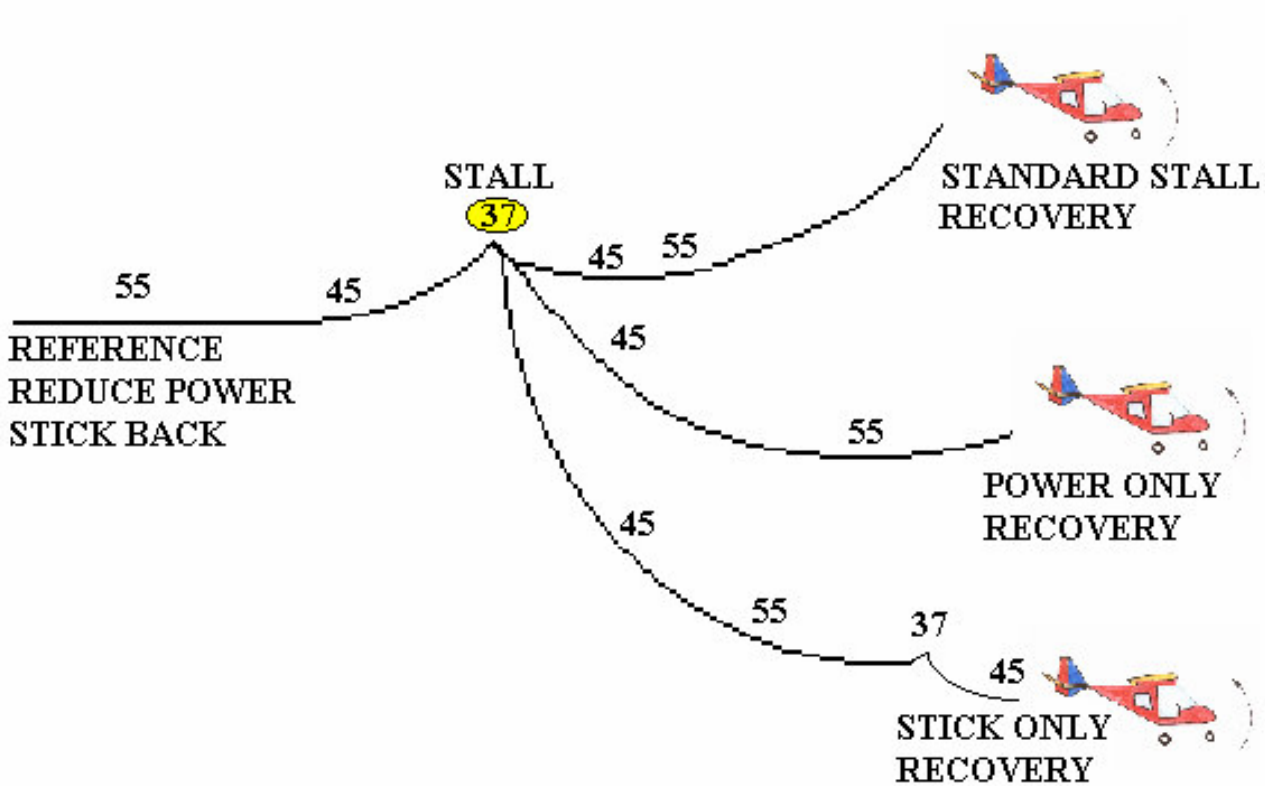
**THEORY:**



**Aerodynamic Buffet - Nose Heaviness - Possible Wing Drop**

**Wing Drop – use Rudder**

**HOW:**

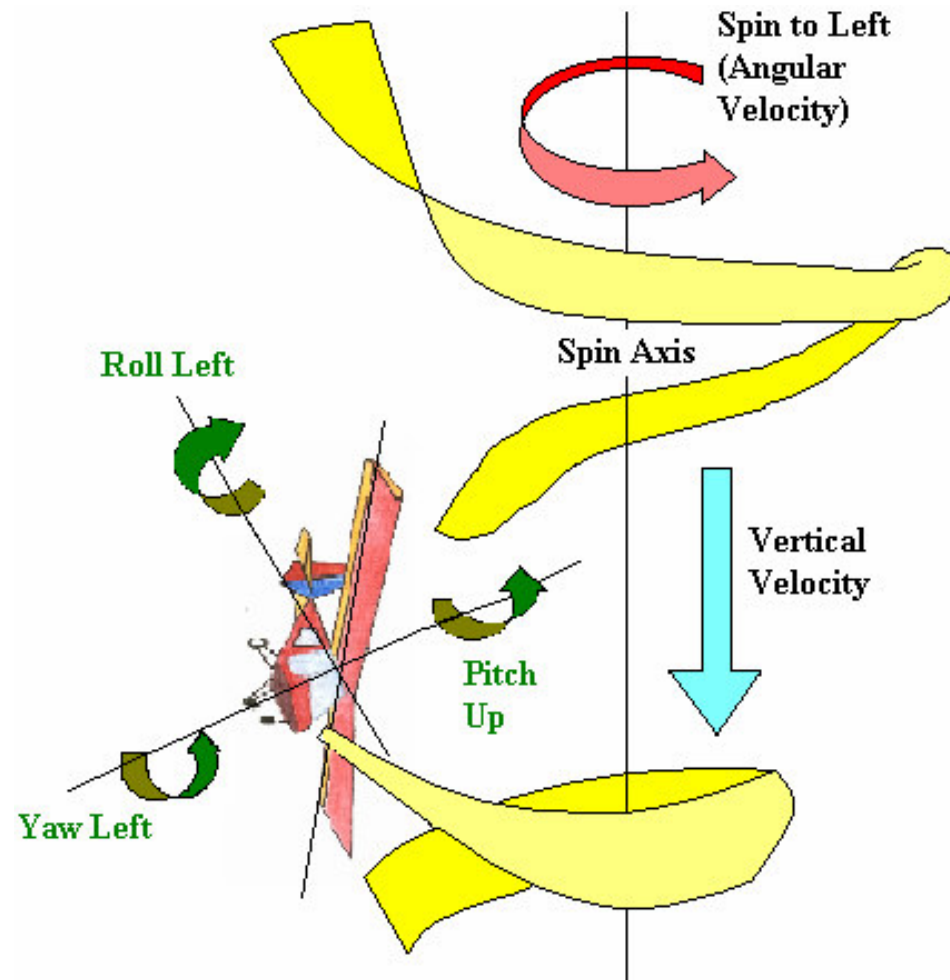


**Stall in a Turn**

**Airmanship:** Height 1000 ft, Security, Engine, Location, Lookout

## EXERCISE 11 – SPIN AWARENESS

AIM:

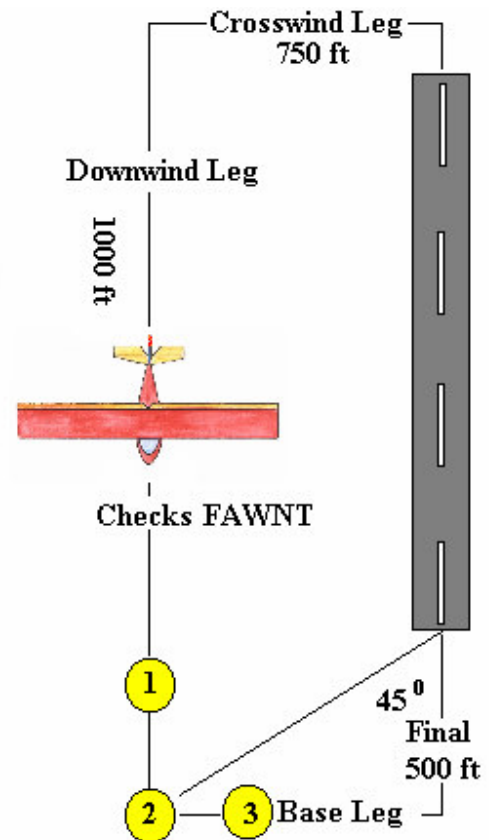


## EXERCISE 12 & 13 – TAKE OFF – CIRCUIT - LANDING

**AIM:**

**WHY:**

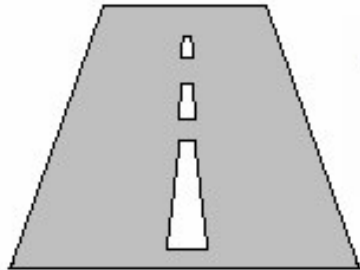
**HOW:**



**APPROACH - GAS**



**Glideslope - POWER**

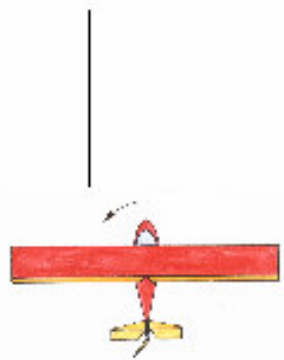


**Speed -**

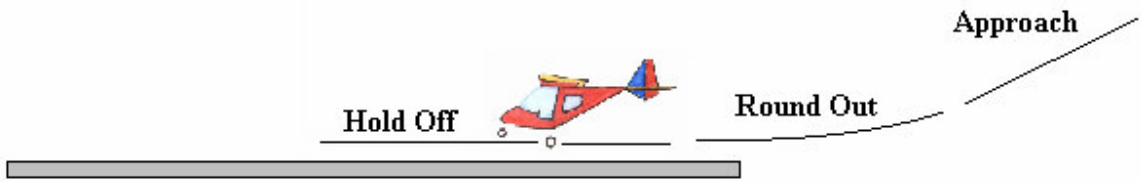
**Low Speed - Stick Forward**

**High Speed - Stick Back**

**Never LESS than 50 KTS on Approach**



**Alignment - PEDALS**

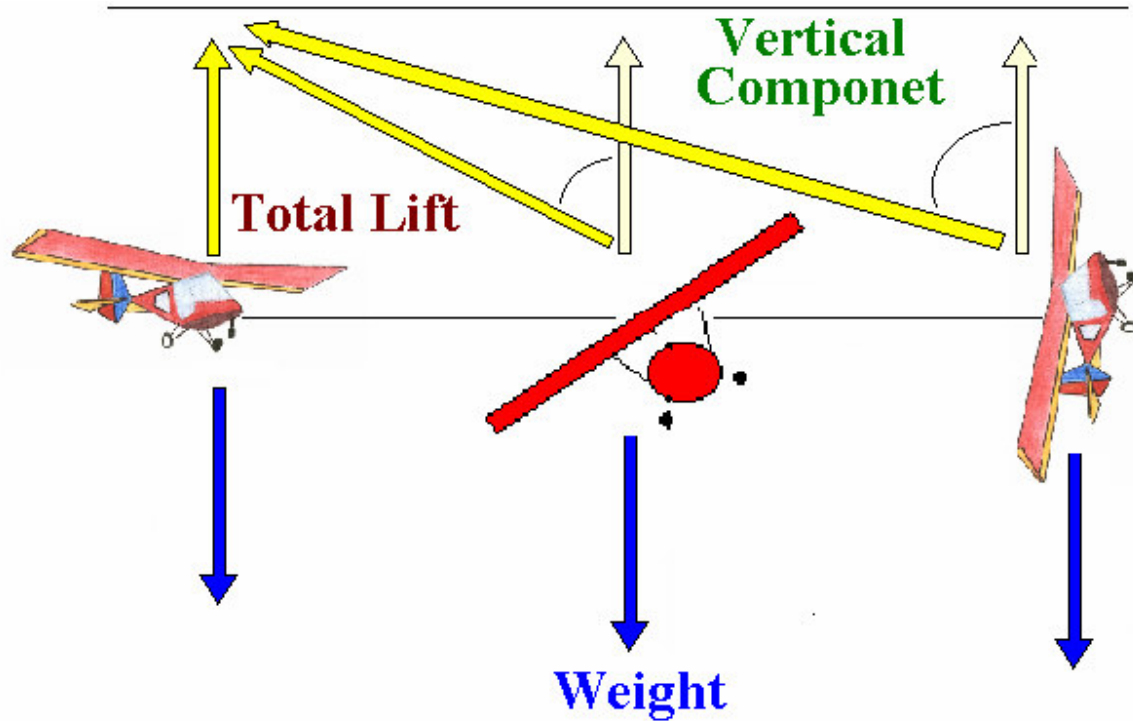




## EXERCISE 14 – ADVANCED TURNING

**AIM:**

**WHY:** Cloud or obstruction ahead  
Stall X1.4 in 60° bank, 3X induced drag



## HOW:

To enter:

- Reference point
- Co-ordinated stick and rudder
- Passing 30° add power
- Sustain stick for 2 g
  - Airspace
  - Angle
  - Attitude
  - Airspeed
  - Altimeter
  - Adjust

To Exit:

- Anticipate reference point
- Opposite stick and rudder
- Reduce power
- Lower nose

## **EXERCISE 15 – RECOGNITION & RECOVERY FROM UNUSUAL ATTITUDES / PREVENTION OF DANGEROUS CONDITIONS**

**AIM:**

**WHY:**

**Theory:** Limits

- ✓ Bank 60°
- ✓ Vne 102 kts
- ✓ Va
  - ✓ for max control input
  - ✓ for very turbulent situations
- ✓ G- Limits +4 -2

**RECOGNISE ATTITUDE & ENERGY STATE**

**HOW:**

NOSE	WINGS	ACTION
HIGH	LEVEL	
HIGH	BANK	
LOW	LEVEL	
LOW	BANK	