# **Slow Flight**

- Clearing Turns
- Continuity Check (Engines/Vacuum/Amp)
- Flow Check
  - Flaps up
  - Cowl Flaps open
  - Gear up
  - Pumps on
  - Mixture rich below 4000 (Slightly enrich)
  - o Props 2500
  - Throttles 12" MP
  - Gear Down IAS <140</li>
  - o Flaps ALL THE WAY Down IAS <120
- Airspeed 75 MPH, just above stall.
- Throttles 18-20" MP
- CLEAN UP
  - Add power and Lower nose at the same time
  - Flaps up 1/2
  - o Gear up
  - Flaps up remaining ½ (105 112)
  - Fuel pumps off
- Cruise flight: 17" 2500

### Power off stall (3000 AGL>)

- Clearing Turns
- Continuity Check (Engines/Vacuum/Amp)
- Flow Check
  - Flaps up
  - Cowl Flaps open
  - o Gear up
  - Pumps on
  - Mixture rich below 4000 (Slightly enrich)
  - o Props 2500
  - Throttles 12" MP
  - Gear Down IAS <140</li>
  - o Flaps FULL DOWN IAS <120
- Airspeed 90 MPH (14-15"), lower nose to descend 100', hold altitude, power off, pitch up and stall.
- CLEAN UP
  - o FULL power and Lower nose at the same time
  - o Flaps up 1/2
  - o Gear up
  - $\circ$  Flaps up remaining  $\frac{1}{2}$  (105 112)
  - o Fuel pumps off
- Cruise flight: 17" 2500

## Power on stall (3000 AGL>)

- Clearing Turns
- Continuity Check (Engines/Vacuum/Amp)
- Flow Check
  - Flaps up
  - Cowl Flaps open
  - Gear up
  - o Fuel Pump on
  - Mixture rich below 4000 (Slightly enrich)
  - Throttles 12" MP (Until 105)
  - o Props 2100
- Hold level altitude and decelerate
- Throttles 21" MP
- Slowly pitch up 15°, when stall occurs pitch to horizon.
- Maintain 21" of MP
- CLEAN UP
  - Add power and Lower nose at the same time
  - Fuel pumps off
- Cruise flight: 17" 2500

#### **Accelerated Stall**

- Clearing Turns
- Continuity Check (Engines/Vacuum/Amp)
- Flow Check
  - o Flaps up
  - Cowl Flaps open
  - o Gear up
  - o Fuel Pumps on
  - Mixture rich below 4000 (Slightly enrich)
  - o Throttles 17" MP (Hold @ 120 MPH)
  - o Props 2100
  - Roll into 45° bank turn maintain altitude
  - o Reduce power
  - o (Will stall at 100 MPH)
- Throttles 21" MP & Roll to level flight.
- CLEAN UP
  - Lower nose and recover to level altitude.
  - Fuel pumps off
- Cruise flight: 17" 2500

#### **Vmc Demonstration**

- Clearing Turns
- Continuity Check (Engines/Vacuum/Amp)
- Flow Check
  - Flaps up
  - Cowl Flaps open
  - Gear up
  - Mixture rich below 4000 (Slightly enrich)
  - o Props 2500
  - o Boost Pumps on
  - o Throttle 15" until 120 MPH then 16-17"
- PROP HIGH
- Left engine idle
- Right engine full pwr
- Pitch up 1°/sec
- Raise left eng 3°-5°
- Recover at BUFFET, STALL WARNING LIGHT, or 10° Hdg Chg
- Reduce pwr right engine ½ and lower nose
- Raise nose, full power till 105 VYSE (Blue line).
- CLEAN UP
  - o Cruise flight: 17" 2500

## **Single Engine Approach**

- Approach speed of 23" 2500 (120)
- 0 Thrust or 12" on inoperative engine
- Capture GS
- Configure @ GS
  - o Gear down
  - o Fuel Pump on
  - o Flaps UP
  - Mixture Rich
  - o 17" MP
  - o @ 500' above minimums....
  - o Full Props & Gear Check Light
  - Final approach @ 105 (Blue Line) until landing is assured.

# **Steep Turns**

- Approach speed of 17" 2500 (120)
- Start roll either left or right 45-50°
- @ 30° increase power to 19" maintain altitude & airspeed
- After 360° bank aircraft to straight and level and go in opposite direction
- CLEAN UP
  - o Cruise flight: 17" 2500

# **Emergency Decent**

- Throttle idle
- Props FULL
- Gear Down IAS <140 and maintain 140 MPH
- Bank 45°-50°

## **Normal Approach**

- Approach speed of 17" 2500 (120)
- Downwind: Gear Down, ½ Flaps, Fuel Pump on
- Turn final and capture GS 105 MPH
- Full Props & Gear Check Light

# **Single Engine Pattern Approach**

- Approach speed of 20-23" 2500 (120)
- No CONFIG on downwind
- GEAR DOWN base turn
- Fuel Boost on
- Turn final and capture GS 105-110 MPH
- Full Props & Check Gear Light

### MAP/Go Around

- Full power and raise nose 7-8°
- Gear up positive rate
- Single Engine climb out: 105
- Multi Engine climb out: 112

## **General Power Settings**

Climb out: 25" 2500 RPM; Boost pumps off after 1000 AGL

En-route cruise: 20" 2300 (140)

Instructional Cruise: 16-17" 2500 (120)