Climbing & Descending

- Demonstrate Climb (5200rpm) LPAT Check T's & P's (500ft) Level Off LAPT
- Demonstrate Descent (4000rpm) LPAT Check T's & P's (500ft) Level Off LPAT
- Student to demonstrate Climb 5200rpm @ 85kts Get them to work out how to increase ROC at same RPM
- Student to demonstrate Descent 4000rpm @ 90kts- 500ft Get them to work out how to increase ROD at 90kts

Summary: Power controls ROD & ROC and Attitude controls Airspeed

Now show me a decent at 200ft per minute while maintaining 90kts

Effects of Controls

HORIZON / ATTITUDE / +STABILITY

INSTRUCTOR TO DEMO THEN STUDENT

- ELEVATOR / REARWARDS/ FORWARDS SUMMARY - PRIMARY / ELEVATOR / PITCH
- AILERON / RIGHT / LEFT SUMMARY - PRIMARY / AILERON / ROLL

RUDDER / RIGHT / LEFT SUMMARY - PRIMARY / RUDDER / YAW

FURTHER EFFECTS - INSTRUCTOR / STUDENT

ELEVATOR / REARWARDS/ FORWARDS SUMMARY - FURTHER / PITCH / SPEED

AILERON / RIGHT / LEFT SUMMARY - SECONDARY / ROLL / SLIP

RUDDER / RIGHT / LEFT SUMMARY - SECONDARY / YAW / ROLL

STRAIGHT & LEVEL

HORIZON / DEFINITION / +STABILITY

VISUAL REF / INSTRUMENT REF

Demonstrate SLIP INDICATOR

STUDENT TO FLY S&L FOR A FEW MIN.

INSTRUCTOR TO DISPLACE AIRCRAFT Climb - Student gets it S&L Roll - Student to get it S&L

DEMONSTRATE @ VARIOUS IAS 4000rpm / 5200RPM

Summary: LOW POWER HIGH AOA FOR S&L HIGH POWER LOW AOA FOR S&L

INSTRUCTOR CONTROLS POWER STUDENT CONTROLS COLUMN @ VARIOUS AIR SPEEDS

STUDENT THEN CONTROLS BOTH POWER AND STICK @ VARIOUS AIRSPEEDS

THEN HEAD TOWARDS GLASSHOUSE TO EXPERIENCE ROUGHER AIR

AIRFLOW / LOW SPEED / CONTROLS SUMMARY - LESS RESPONSIVE / SLOPPY

AIRFLOW / HIGH SPEED / CONTROLS SUMMARY - MORE RESPONSIVE / FIRM

POWER & PROP / LOW SPEED / HIGH SPEED SUMMARY - HIGH POWER / UP / LEFT LOW POWER / DOWN / RIGHT

ANCILLORY CONTROLS - POWER / TRIM

POWER / FORWARD / RPM INCREASE / REARWARD / RPM DECREASE

TRIM / DOWN / NOSE PITCH DOWN / UP / NOSE PITCH UP

FLAP / FLAP IS A LIFT GENERATING DEVICE LAND AT LOWER SPEED

TURNING

STALLS

Demonstrate Right Hand Gentle Turn LPAT Move Control Column right Bring Control Column to neutral Keep Eyes forward Attitude / Look / Airspeed Attitude / Look / Bank Angle Attitude / Look / VSI Control Column left / Left Rudder Wings level with horizon Adjust Attitude

Demonstrate Left Hand Gentle Turn Student to have a go Right then Left turn

Demonstrate no Rudder coming out of turn.

Demonstrate Spiral Descent.

Demonstrate Steep Turn Student to have a go at a 45 degree turn

Demo Climbing and descending turns Student to have a go

Student to follow beach back to aerodrome

CIRCUITS

Pre take off safety brief Rudder Straight with centre line Rolling Call Advance throttle over 3-5 seconds Rudder to maintain centre line Airspeed alive / rotate after 60kts 300ft Flaps up Climb attitude of 70kts 700ft turn crosswind 1000ft in circuit 45 degree with runway turn downwind Power back to 4600rpm Downwind checks Abeam threshold reduce power to 2800rpm Below 80kts 1st Stage flaps 45 degrees turn base / make radio call Halfway down base 2nd stage flaps Turn on to final Maintain centreline with rudder Below 300ft wings level with Aileron Use rudder to maintain centreline Reduce power to idle over threshold 10ft eyes to end of runway and hold Retract to 1st Stage Flap / Trim / Fullpower

HASSELL CHECKS

Height Airframe Security Switches Engine Location Lookout

STALL SYMPTOMS Slow IAS Sloppy Controls High AoA Buffet

RECOVERY

Move Control column forward Above 60kts in the Sling Raise the nose

When level with Horizon Full Power / Adopt Climb Attitude

Make sure you are in balance

If one wing stalls use opposite rudder to the stalled wing. No Aileron

If Flap extended, retract in stages

EMERGENCY PROCEDURES

Seven S's Shape Size Slope Surface Situation Stock Services

ENGINE FAILURE

Adopt Best Glide speed 70kts Turn towards Pre-selected field Restart Checks Mayday Call Passenger Brief Make safe checks

PRECAUTIONARY SEARCH

Pre-select field with over/undershoot Pan Call Fly circuit at 1000ft Fly circuit at 500ft Fly circuit at 200ft

Return to circuit height and fly circuit Make Safe before landing

Contact Brisbane Centre on the ground