## **Ground Theory**

	RPC	RPL	PPL	CPL
MAX TOW	=<600kg	=<1500kg	=<5700KG	ANY
PAX	1	1*unless another	any	any
		Pilot with class1/2		
		Medical		
VFR?IFR?	DAY VFR	DAY VFR	D/N/IFR	any
FLIGHT	<25NM or T/A	<25NM or T/A	anywhere	anywhere
		Unless u have a	in world in	
		Nav endorsement.	an Australian	
			registered	
			Aircraft.	

ALTITUDE 10,000 FT 10,000 FT UNLESS PILOT HAS A CLASS ½ MEDICAL

**ENGINE** 1 1 DEPENDING ON ENDORSEMENTS

CARGO ALLOWED ON SEATS AS LONG AS WITHIN C OF G AND SECURED.

**BEFORE Flying PPL:** - FLIGHT REVIEW IN PAST 2 YEARS -MEDICAL

- 3 TAKEOFFS AND LANDINGS IN LAST 90 DAYS

PAX BRIEF: C- CTRL/COMMS

**H**- HATCH/HARNESS

**E**- EXIT/EMERG

L- LIFE SAVING

**S**- SMOKING

**COEFFICIENT OF LIFT:** Cl ½ Pv2s C=CAMBER p="rho" density of air V= VELOCITY

S=SURFACE AREA OF WING

### **HEMISPHERICAL LEVELS REQUIRED ABOVE 5000 FT**

0-179 DEGREES = ODDS + 500 FT 180-359 DEGREES = EVENS + 500 FT

#### **DOCUMENTS REQUIRED**

AIRCRAFT: ERSA, MR, VTC MAP, POH

PILOT: PPL LICENSE, ASIC ID, MEDICAL

**INSTRUMENTS REQ:** COMPASS, CLOCK (H,M,S), ASI, ALT (+/- 100 FT)

**EMERGENCY EQUIPMENT:** ELT IF > 50NM FROM DEPARTURE, LIFE JACKETS ON A/C IF ABOVE H20 & AT GLIDING DISTANCE (MUST WEAR IF < 2000FT). Life raft if more than 30 min cruise from land.

**TRANSPONDER CODES:** 7700 – EMERGENCY 7600 – RADIO FAILURE

7500 – HI JACKING 1200 – VFR 3000 – CLASS D

**DRUG AND ALCOHOL:** - 0.00 FOR RPC - 0.02 FOR RPL,PPL AND CPL - 8 HRS BOTTLE TO THROTTLE

- NO OTC MEDS - CASA & RAMP OFFICER CAN TEST

IMSAFE: ILLNESS MEDICATION STRESS ALCOHOL FATIGUE EATING

TAF: INTER=CHANGE<30MIN TEMPO=CHANGE 30-60MIN

9999 MEANS GREATER OR EQUAL TO 10KM VIS

CAVOK MEANS: NO CLOUD<5000FT, >10KM VISABILITY AND NO SIGNIFICANT WIND.

#### VMC AISPACE CONDITIONS:

**CLASS A:** No vfr aircraft allowed only ifr.

**CLASS C:** - IF >10,000FT BE CLEAR of CLOUD BY 1000FT VERTICALY AND 1500m HORIZONTAL, MIN 8KM VISIBILITY

IF <10,000FT BE CLEAR of CLOUD BY 1000FT VERTICALY AND 1500m HORIZONTAL, MIN 5KM VISIBILITY

**CLASS D:** -MIN 5KM VISABILITY, 500FT BELOW CLOUD 1000FT ABOVE CLOUD 600M HORIZONTAL.

**CLASS E:** - IF >10,000FT BE CLEAR of CLOUD BY 1000FT VERTICALY AND 1500m HORIZONTAL, MIN 8KM VISIBILITY

IF <10,000FT BE CLEAR of CLOUD BY 1000FT VERTICALY AND 1500m HORIZONTAL, MIN 5KM VISIBILITY

**CLASS G:** - IF >10,000FT BE CLEAR of CLOUD BY 1000FT VERTICALY AND 1500m HORIZONTAL, MIN 8KM VISIBILITY

IF <10,000FT BE CLEAR of CLOUD BY 1000FT VERTICALY AND 1500m HORIZONTAL, MIN 5KM VISIBILITY

IF <3,000FT BE CLEAR of CLOUD AND 5KM VISIBILITY

SPECIAL VFR @ 1600M VIS

#### **SPEEDS ON AQUILA:**

**Vs0-** Stalling speed without engine power in landing configuration. **Vs0-** 60 KTS

Vx- Best angle of climb. Vx- 60 KTS

**Vy-** Best rate of climb speed. **Vy-** 65 KTS

**Vno-** Maximum Structural Cruising Speed is the speed **Vno-**130KTS

that should not be exceeded except in smooth air

and then only with caution.

Vne- Never Exceed Speed. Vne-165KTS

Va- Manoeuvring Speed Va-112 KTS

Vfe- Maximum flap extended speed Vfe-90 KTS

**BEST GLIDE SPEED 78 KTS** 

NORMAL BASE: 75KTS t/o flap NORMAL EARLY FINAL: 70KTS NORMAL LATE FINAL: 65KTS

FLAPLESS BASE: 70KTS FLAPLESS FINAL: 65KTS

**FUEL:** 120L – AVGAS 100LL OR 95 MOGAS OR HIGHER.

CANNOT REFUEL WITHIN 5M SEALED BUILDING, 6M OTHER A/C OR 15M PUBLIC AREA.

**OIL:** SG OR HIGHER (SPORT+ SHELL OIL) 3.2L-3.6L

**STALLS:** We stall at an AoA NOT AIRSPEED

HASELL CHECKS: HEIGHT- RECOVER BY 4000AGL

**AIRFRAME-** DIRTY OR CLEAN STALL

**SECURITY-** HATCHES AND HARNESSES

ENGINE- T'S AND P'S, CARBY HEAT, FUEL PUMP

**LOCATION-**NOT OVER BUILT UP AREA

LOOKOUT- 360 DEGREES TURN FOLLOWED BY 90 DEGREES AFTER EACH

STALL TO CHECK FOR TRAFFIC.

**RECOVER STALL-** OPPOSITE RUDDER (IF WING DROPS), LOWER NOSE, SMOOTHLY APPLY POWER, RAISE NOSE TO GO BACK INTO A CLIMB.

**STEPS FOR A CLEAN STALL-** CARBY HT, POWER IDLE, BACK PRESSURE, POWER TO 3000RPM (WHEN APPROACHING STALL), 2 STAGE FLAP, CONTINUE BACK PRESSURE

**STEEP TURNS**-PICK REFERENCE POINT, CLEAR L C R OR R C L, APPLY FULL POWER PAST 30 DEGRE, BANK/BALANCE(RUDDER/BACKPRESSURE)

**SPIRAL DIVE RECOVERY:** PWR TO IDLE, ROLL WINGS LEVEL, RAISE NOSE AND APPLY FULL PWR WHEN NOSE PASSES HORIZON.

**SFTO:** FLAP 20 OR 30 DEGREES, APPLY BRAKES, GENTLY TO FULL PWR, RELEASE BRAKE AT 5000RPM APPLY BACK PRESSURE TO GET PLANE OF GROUND.

**SFL**: FULL FLAP, 60KT APPROACH, AIM FOR BEFORE KEYS AND FLARE BEFORE KEYS, USE PWR TO STOP DESCENT

# **Engine Fire On Ground**

- 1. Fuel Selector Valve OFF
- 2. Throttle FULL OPEN
- 3. ALT/BAT Switch OFF
- 4. Ignition Switch OFF
- 5. Aircraft EVACUATE

## 3.5.2 In-Flight Engine Fire

- 1. Fuel Selector Valve OFF
- 2. Airspeed 90 KIAS
- 3. Flaps TAKE-OFF Position
- 4. Throttle FULL OPEN
- 5. Cabin Heat OFF
- 6. Canopy slide-window FULL OPEN
- 7. Proceed with Power-Off Landing in accordance with 3.3.4 A)

### 3.5.3 Electrical Fire and Formation of Smoke on Ground

1. ALT/BAT Switch OFF

If engine is running:

- 2. Throttle IDLE
- 3. Fuel Selector Valve OFF
- 4. Ignition Switch OFF
- 5. Canopy OPEN
- 6. Fire Extinguisher (if installed) ACTIVATE as required

**YSBK ARRIVALS:** 11- L C R 1500FT@2RN OR PROSPECT THEN DESCEND TO 1000 FT BY 3MILES OR WARWICK FARM RACE COURSE.

**29-** 1500 FT @ 2RN AND PROSPECT MAINTAIN 1500FT UNTILL DOWNWIND CALL AND NOTIFIED BY TOWER THAT YOU ARE CLEARED FOR VISUAL APPROACH, ONCE CLEARED DESCEND TO 1000FT AND NORMAL CIRCUIT LANDING.

YSBK DEPARTURES: 11-AFTER TAKE OFF CLIMB TO 1500FT DOWNWIND

29-AFTER TAKE OFF CLIMB TO 1000FT UPWIND