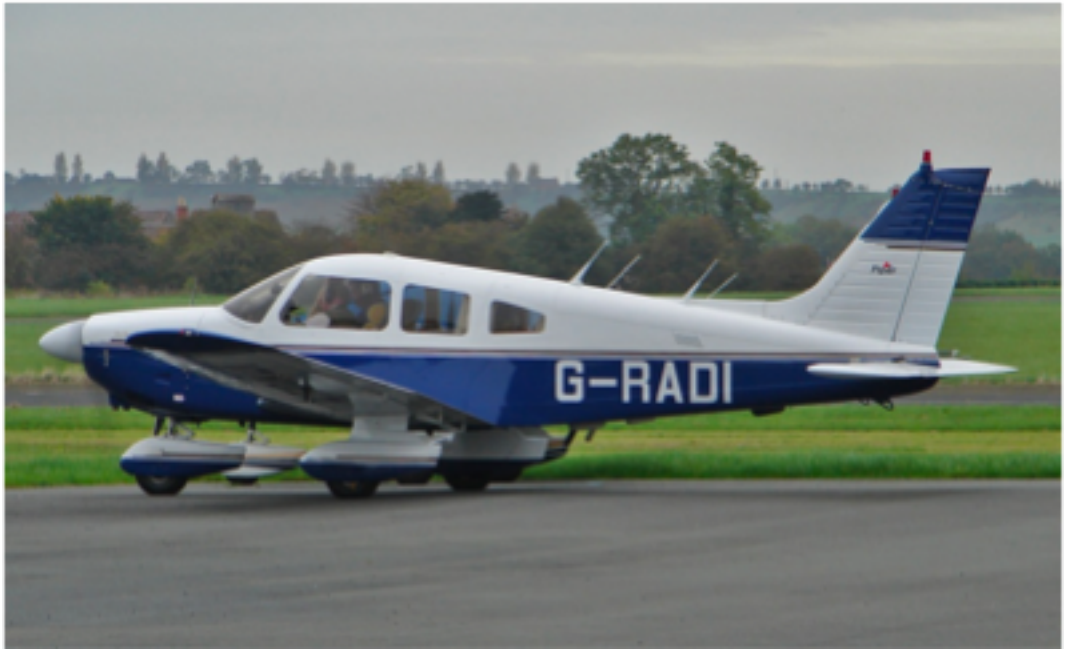
SHERWOOD FLYING CLUB

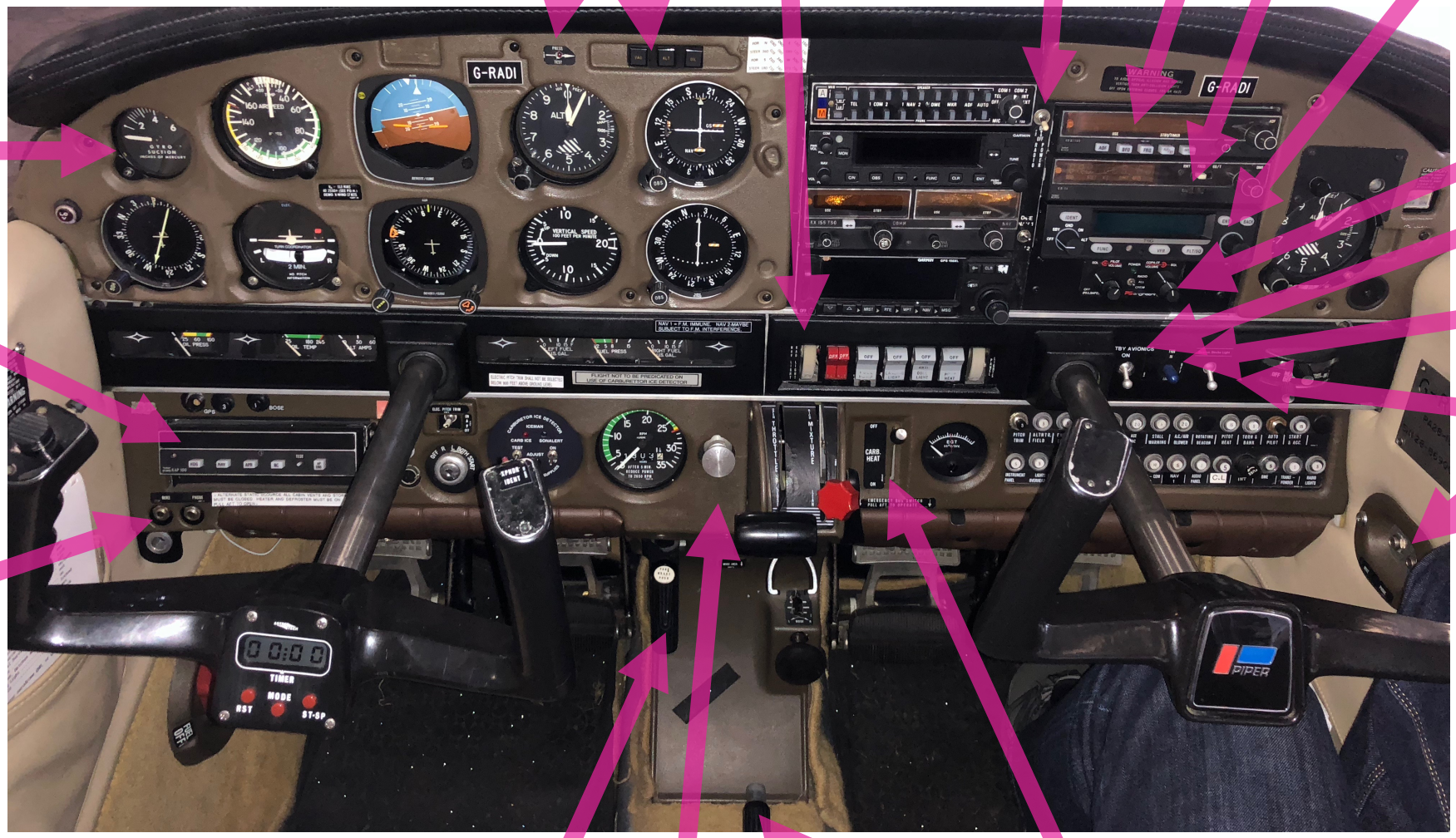
G-RADI – PA28-181 Archer II Familiarisation

- Specifications / Speeds
- Starting
- Take off
- Circuits
- Manoeuvres
- Emergencies



G-RADI

Panel Layout



Archer II

Specifications

- Engine – O-360-A4A- 180 HP (vs 160 HP for G-BRHC)
- Fuel – 189L (50 USG), 182L (48 USG) useable
  - Consumption (10 USG/hr vs 9 USG/hr G-BHRC)
- Oil capacity – 9 quarts (Min 6 qt for flight)
- MTOW 2550lb / 1157kg (vs 2325lb / 1055kg for G-BRHC)
- Speeds

Speeds	G-RADI	G-BHRC	Grob 115
Vne	154	160	164
Vno	125	126	135
Vfe	102	103	94
Max Xwind	17	17	20
Vrotate	52-65 kt 45-54 kt (25°)	55 / 52 (flap)	55
Vx / Vy	64 / 76	63 / 79	57 / 67
Vapproach	65	65	65

Archer II

Starting

Normal Cold Start

- Throttle ¼ inch
- Fuel pump ON to check pressure then OFF
- Prime – 3 pumps
- Magnetos – START

Engine HOT Start

- Throttle ½ inch
- Rest as per cold

Engine Start if Flooded

- Throttle full open, fuel pump off, Mixture Cutoff
- When engine fires, advance Mixture

Archer II

Take Off

- Fuel pump should be on
- 0° flaps for a normal take-off
  - Rotate 55 kts
- 25° (second notch) for a short field take-off
  - Rotate between 41-49 kts and accelerate in ground effect to 45-54
- Accelerate and normal climb at 76 KIAS (or 64 KIAS for obstacle clearance)
- Retract flaps at 250ft AGL

Archer II

Circuits

- Downwind
  - 90 kts, 2100 RPM
- Base leg
  - 75 kts, 1500 rpm, Carb Heat
  - Flaps to 25° (2nd notch)
- Final
  - 66 kts, 1500 RPM
  - Flaps to Full
  - (70 knots for flapless approach)

Archer II

Manoeuvres

- PFL / Gliding
  - Best glide speed 75 kts
  - Approx 1.5nm per 1000 ft AGL
- Stalls
  - HASELL checks as usual
  - Fuel pump ON
  - Stall speed: full flaps 49 kts, Clean 55 kts