

- ▶ Fuel - switch to L/R
- ▶ Gust Lock
- ▶ Close Flight Plan
- ▶ Hobbs Time - note
- ▶ Check Under Seats
- ▶ Cabin / Baggage - lock
- ▶ Post-Flight Walkaround
- ▶ Engine Failure
- ▶ Short Flow
 - Fuel - on/both
 - Mixture - full/check
 - Electrical Pump - on
 - Alternate Air - on
 - Mags. - check all
- ▶ **Glide and Trim**
 - **Speed: 68 kts**
 - **Ratio: 9, 1.48nm/1000ft**
- ▶ Wind and Landing Site
- ▶ Longer Flow
 - Engine Indicators
 - Short Flow Again
- ▶ **No Restart**
 - Fuel - off
 - Mixture - idle cut-off
 - Prop/Throttle - off
 - Mags. - off
 - Master - off
 - Belt and Seat - check
 - Unlatch Door
 - Brace
- ▶ Approach - 80/70/65 kts

DA40-G1000 (Ted Yin v0.6)

Initial

- ▶ Papers - A.R-0-W.
- ▶ Controls - free & correct
- ▶ Mags. - key out
- ▶ Mixture - idle cutoff
- ▶ Throttle - idle
- ▶ Electrical - off
- ▶ Essential Bus - off
- ▶ Avionics - off
- ▶ Master - on
- ▶ Fuel Pump - check
- ▶ Fuel - note
- ▶ Flaps - check & set T/O
- ▶ Lights/Pitot - test
- ▶ Master - off
- ▶ Hobbs Time - note

Walkaround

- ▶ Canopy/Door - check
- ▶ Fuel/Oil - test/sample
- ▶ Caps/Drains/Vents
- ▶ Surfaces/Controls
- ▶ Stall Strips/Fairings
- ▶ Exhaust/Antennas
- ▶ Prop/Air Intakes x3
- ▶ Pitot/Static/Stall
- ▶ Gear/Tires/Brakes
- ▶ Ties/Chocks
- ▶ Final Walkaround

Pre-Start

- ▶ Rear Door - secure
- ▶ Rudder Pedals - adjust
- ▶ Seat Belts
- ▶ Parking/Brakes - test/set
- ▶ Circuit Brkrs. - check
- ▶ Passenger - brief
- ▶ Strobe (ACL) - on
- ▶ Avionics - off
- ▶ Fuel Selector - least
- ▶ Canopy - pos. 1/2

Start

- ▶ Prime
 - Mixture - idle cutoff
 - Prop - high RPM
 - Friction - adjust
 - Master Bat. - on
 - Throttle - 1.2"
 - Electric Pump - on
 - Warm
- ▶ Mixture - 1-3 sec
- ▶ Cold
- ▶ Mixture - 3-5 sec

- ▶ Throttle - 0.4"
- ▶ "Prop Clear!"
- ▶ Mags. - start
- ▶ Throttle - 1000 RPM
- ▶ Oil Pressure - 15 secs.
- ▶ Electric Pump - off
- ▶ Master Alt. - on
- ▶ Engine Inst. - no Xs
- ▶ Volts/Amps - [25-30] [X>0]
- ▶ Fuel Pressure - 14-35 psi
- ▶ Mixture - lean (peak)

Pre-Taxi

- ▶ Flaps - up, then T/O
- ▶ Lights - as required
- ▶ Avionics - on/set
- ▶ GPS - DB date
- ▶ Fuel Totalizer - enter
- ▶ ATIS - PFD/backup/AP(?)
- ▶ Radio - test
- ▶ Transponder - squawk
- ▶ Check - TC/Alt/HSI<->MC
- ▶ Clearance - obtain
- ▶ Brakes - release/test

Run-Up

- ▶ Parking Brake - set
- ▶ Seat Belts - check
- ▶ Canopy/Door - lock
- ▶ Door Warning - off
- ▶ Flight Controls - correct
- ▶ Instruments - scan
- ▶ Alternate Static - check
- ▶ AP - MET/HDG
- ▶ Trim - T/O

- ▶ Fuel Selector - fullest
- ▶ Hdg./Alt. Bugs
- ▶ GPS/Status Bar/Ann. Test
- ▶ MFD Range/Track Up
- ▶ Comm/Nav/VOR/FP
- ▶ Mixture - rich
- ▶ Throttle - 2000 RPM
- ▶ Cycle Prop x3 - 250-500
- ▶ Mags. L/R - 175, 50.
- ▶ Alternate Air - check
- ▶ Engine Inst. - check
- ▶ Idle Check
- ▶ Throttle - 1000 RPM
- ▶ Mixture - lean
- ▶ Lights - as required
- ▶ ADSB Handheld - on

Pre-Takeoff

- ▶ Abort Plan/Lost Comm.
- ▶ Canopy/Door - lock

Takeoff

- ▶ "Lights, Camera, Action"
- Mixture/Prop/Throttle
- ▶ Engine Inst. - green
- ▶ Vr - 59; then 67-60 KIAS
- ▶ Safe Altitude
- Prop - 2400 RPM
- Elect. Pump - off
- Ldg. Light - off

Climb

- ▶ Vy (T/O)
- 67-54 KIAS
- 68 minus 1.8 for each 100 lbs under 2646
- ▶ Cruise
 - Flaps - up
 - Vy: 76-60 KIAS
 - ▶ Prop - 2400 RPM
 - ▶ Mixture - rich
 - >5000 hold const. EGT
- ▶ Throttle - full
- ▶ Engine Inst. - green
- ▶ Trim - as required
- ▶ High Altitude - pump on

Cruise

- ▶ Flaps - up
- ▶ Throttle - 21-24"
- ▶ Prop - 1800-2400 RPM
- ▶ Mixture
 - Higher Power - richen
 - Economy: max EGT & <=75% . Power: 1000F/550C lower
- ▶ Flow Check (~15 min)
- ▶ Trim, Fuel
- Mixture, Prop, Throttle
- Flaps, Engine Inst.
- Pump, Mag., Master
- ▶ CHT: 150-4000F
- ▶ Oil: 165-2200F

Descent

- ▶ Mixture - richen slowly
- ▶ Prop - 1800-2400 RPM
- ▶ Throttle - as required

- High Altitude – pump on
- Flow Check
- CHT Cool Down
- <= 50°F/22.8°C pm

Pre-Landing

- ATIS/Rwys & Patterns
- "CGJMPJFM"

- G: Fuel Selector
- downwind/fulltest
- M: Mixture – rich
- P: Elect. Pump – on
- P: Prop – high RPM
- S: Seat Belts – secure
- F: Flaps – as required
- T/O <100 KIAS
- LDG <91 KIAS

- Trim – as required
- Ldg. Light – on
- Approach – 73-50 KIAS

Go Around

- Throttle – full
- Vy – 67-54 KIAS
- Flaps – T/O
- Safe Altitude
- Prop – 2400 RPM
- Elect. Pump – off
- Cruise Climb

Post-Landing

- Throttle – 1000 RPM
- Mixture – lean
- Flaps – up
- Elect. Pump – off
- Pitot Heat – off
- Trim – T/O
- Lights – as required
- Clearance – obtain

Shutdown

- ELT – check (12L1.5)
- Avionics – off
- Electrical – off
- ACL Strobes – on
- Throttle – 1000 RPM
- Mags. – off then both
- Mixture – idle cutoff
- Mags. – key out
- Tach Time – note
- Master – off

Post-Flight

- ADSB Handheld – off
- Tiedowns/Chocks
- Pitot Cover

- Gust Lock

- Close Flight Plan
- Hobbs Time – note
- Check Under Seats
- Canopy/Door – lock
- Post-Flight Walkaround

Engine Failure

- Short Flow
- Fuel Selector – fullest
- Mixture – full/check
- Elect. Pump – on
- Alternate Air – on
- Mags. – check all
- **Glide and Trim**
- **Speed: 70-60 KIAS**
- **Ratio: 0.01 1.45mm/1kft**

- Wind and Landing Site
- Longer Flow
- Engine Inst.
- Short Flow Again

- Wind Restart

- Airspeed >= 70 KIAS
- Short Flow
- Mags. – **both**
- Mixture – lean and slowly richen
- Stationary Restart

- Airspeed >= 80 KIAS
- Electrical – off
- Avionics – off
- Master – on
- Mags. – **start**
- **No Restart**
- Fuel Selector – off
- Mixture – idle cutoff
- Mags. – off
- Master – off
- Belt and Seat – check
- Unlatch Door
- Brace

C0 Contamination

- Cabin Heat – off
- Ventilation – open
- Emergency Windows – open
- Forward Canopy
- partially open
- **D0 NOT lock/unlock rear door during flight**

Airspeeds (KIAS)

- Weights
- 254lb/2535/2205/1874 lbs

CL725-61000 (Red v1.2)

Initial

- Vy
- Up – 76/73/66/60
- T/O – 67/66/60/54
- Best Glide
- 76/73/66/60
- 70 @ 2300 lbs

- Va

- M/M 40-227
- no – 100 @ 2161-2535
- yes – 111 @ 2204-2646
- below 2161/2204 – 94
- 101 @ 2300 lbs
- Approach Speeds
- Engine Out
- Up – 76/73/66/60
- T/O – 74/72/66/59
- LDG – 73/71/63/50
- Normal – 73/71/63/50

Walkaround

- Fuel/Oil – dip/sample
- Caps/Drains/Vents
- Surfaces/Controls
- Exhaust/Antennas
- Prop/Belt/Air Intake
- Pitot/Static/Stall
- Gear/Tires/Brakes
- Ties/Baggage Door
- Final Walkaround

Pre-Start

- Doors – secure
- Belts/Seat Track
- Brakes – check, set
- Circuit Brks. – check
- Passenger – brief
- Beacon – on
- Avionics – off
- Fuel – both

Start

- Stby. Battery – test/arm
- Engine Ind. – no XS
- Volts – [E>24V] [LK1.5]
- Amps – S<4/arm on
- Prime:
- Mixture – idle cutoff
- Brakes – secure
- Master – on
- Throttle – slight
- Aux. Pump – on
- Mixture – prime
- warm: 0-3 sec
- cold: 3-5 sec
- Aux. Pump – off
- Mixture – 3/4 rich

- "Prop Clear!"
- Mags. – start

- Throttle – 1000 RPM
- Oil Pressure – 30 secs.
- Volts/Amps – [E>24V] [E>0]
- Mixture – lean for taxi

Pre-Taxi

- Flaps – up
- Lights – as required
- Avionics – on/set
- GPS – DB date
- Fuel Totalizer – enter
- ATIS – PFD/backup/AP(?)
- Radio – test
- Transponder – squawk
- Check – TC/Alt/HSI<->MC
- Clearance – obtain
- Brakes – test

Run-Up

- Brakes – set
- Seat Belts – check
- Doors/Windows – secure
- Flight Controls – correct
- Instruments – scan
- Alternate Static – check
- AP – MET/HDG
- Trim – takeoff
- Fuel – on/both
- Hdg./Alt. Bugs
- GPS/Status Bar/Ann. Test
- MFD Range/Track Up
- Comm/Nav/VOR/FP
- Mixture – rich
- Throttle – 1800 RPM
- Mags. – 150, 50
- Engine Inst. – check
- Idle Check

- Throttle – 1000 RPM
- Mixture – lean
- Lights – as required
- ADSB Handheld – on
- Pre-Takeoff
- Abort Plan/Lost Comm.
- Fuel – on/both
- Flaps – 0-100
- Mixture – rich
- Aux. Pump – off
- Pitot heat – as required
- Review Airspeeds
- Time – note/start

Takeoff

- "Lights, Camera, Action"

- Mixture/Throttle
- Engine Inst. – green
- Vr – 55 kts
- Vx – 62 kts, Vy – 74 kts

Climb / Cruise

- Cruise Climb – 75-85 kts
- Flaps – up

- Mixture – lean >3000'
- Flow Check (✓15 min)
- Fuel, Trim
- Flaps, Engine Inst.
- Mixture, Throttle
- Master, Mag., Pump

Descent

- Mixture – richen slowly
- Throttle – as required
- Flow Check

Pre-Landing

- ATIS/Rwys & Patterns
- "CGJMPJFM"
- G: Fuel – on/both
- M: Mixture – rich
- S: Seat Belts – secure
- F: Flaps – as required
- Trim – as required
- Ldg. light – on
- Approach – 80-65 kts

Post-Landing

- Throttle – 1000 RPM
- Mixture – lean
- Flaps – up
- Pitot Heat – off
- Trim – takeoff
- Lights – as required
- Clearance – obtain

Shutdown

- ELT – check (12L1.5)
- Avionics – off
- Lights – off
- Beacon – on
- Throttle – 1000 RPM
- Mags. – off then both
- Mixture – idle cutoff
- Mags. – key out
- Master – off
- Tach Time – note
- Stby. Battery – off

Post-Flight

- ADSB Handheld – off
- Tiedowns/Chocks
- Pitot Cover