

Post-Flight

- ▶ ADBS Handheld - off
 - ▶ Tiedowns/Chocks
 - ▶ Pitot Cover
 - ▶ 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 Vin v0.7)

Ground Operations

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
- ▶ Strobe (ACL) - on
- ▶ Avionics - off
- ▶ Fuel Selector - least
- ▶ Canopy - pos. 1/2
- ▶ Passenger - brief

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] [>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/AL/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
- ▶ ADBS Handheld - on

- ▶ ELT - check (121.5)
- ▶ 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

- ▶ ADBS Handheld - off
- ▶ Tiedowns/Chocks
- ▶ Pitot Cover
- ▶ Gust Lock
- ▶ Close Flight Plan
- ▶ Hobbs Time - note
- ▶ Check Under Seats
- ▶ Canopy/Door - lock
- ▶ Post-Flight Walkaround

Airspeeds (KIAS)

- ▶ **V_r** = 59
- ▶ **Weights**
 - 2646/2535/2205/1874 lbs
- ▶ **V_g** = 76/73/68/60
- ▶ **V_y(Up)** = 76/73/68/60
- ▶ **V_y(T/O)** = 67/66/60/54
- ▶ Approach Speeds
 - Up - 76/73/68/60
 - T/O - 74/72/66/59
 - LDG - 73/71/63/58
- ▶ **V_a**
 - MAM 40-227
 - yes - 111 @ 2284-2646
 - no - 108 @ 2161-2535
 - below 2161/2284 - 94

Shutdown

In-Flight Operations

Pre-Takeoff

- ▶ Abort Plan/Lost Comm.
 - ▶ Canopy/Door – lock
 - ▶ Fuel Selector – fullest
 - ▶ Flaps – T/0
 - ▶ Mixture – rich
 - ▶ Prop – high RPM
 - ▶ Electric Pump – on
 - ▶ Pitot Heat – as required
 - ▶ Review Airspeeds
 - ▶ Time – note/start
- ### Takeoff
- ▶ "Lights, Camera, Action"
 - ▶ Mixture/Prop/Throttle
 - ▶ Engine Inst. – green
 - ▶ Vr – 59, then 67-60 KIAS
 - ▶ Safe Altitude
 - ▶ Prop – 2400 RPM
 - ▶ Elect. Pump – off
 - ▶ Lights – as required
- ### Climb
- ▶ Vy (T/0)
 - ▶ 67-54 KIAS
 - ▶ 68 minus 1.8 per 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 – 1400-2400 RPM
 - ▶ Mixture
 - ▶ Higher Power – richen
 - ▶ Economy: max EGT & <=75%
· Power: 100°F/55°C lower
 - ▶ Flow Check (↗15 min)
 - ▶ Trim, Fuel
 - ▶ Mixture, Prop, Throttle
 - ▶ Flaps, Engine Inst.
 - ▶ Pump, Mag., Master
 - ▶ CHT: 150-400°F
 - ▶ Oil: 165-220°F

Descent

- ▶ Mixture – richen slowly
- ▶ Prop – 1400-2400 RPM
- ▶ Throttle – as required
- ▶ High Altitude – pump on
- ▶ Flow Check
- ▶ CHT Cool Down
- ▶ <= 50°F/22.8°C pm

Pre-Landing

- ▶ ATIS/Rwys & Patterns
- ▶ "CGUMPS"
- ▶ G: Fuel Selector
- downwind/fullest
- ▶ M: Mixture – rich
- ▶ P: Elect. Pump – on
- ▶ P: Prop – high RPM
- ▶ S: Seat Belts – secure
- ▶ F: Flaps – as required
- T/0 <108 KIAS
- LDG <91 KIAS
- ▶ Trim – as required
- ▶ Lights – as required
- ▶ Approach – 73-56 KIAS

Go Around

- ▶ Throttle – full
- ▶ Vy – 67-54 KIAS
- ▶ Flaps – T/0
- ▶ 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/0
 - ▶ Lights – as required
 - ▶ Clearance – obtain
- ### C0 Contamination
- ▶ Cabin Heat – off
 - ▶ Ventilation – open
 - ▶ Emergency Windows – open
 - ▶ Forward Canopy
 - partially open
 - ▶ **D0 NOT lock/unlock rear door during flight**
- ### Engine Failure
- ▶ Short Flow

Fuel Selector – fullest

- ▶ Mixture – full/check
- ▶ Elect. Pump – on
- ▶ Alternate Air – on
- ▶ Mags. – check all
- ▶ **Glide and Trim**
- ▶ **Speed: 76-60 KIAS**
- ▶ Windmill: 1:8.8,
- 1:45m/1kft

- ▶ Stationary: 1:10.3,
- 1:7m/1kft
- ▶ Wind and Landing Site
- ▶ Longer Flow
- ▶ Engine Inst.
- ▶ Short Flow Again
- ▶ Windmill 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

CL225-61000 (Ted v1.2)

Initial

- ▶ Papers – A.R.0-W.
- ▶ Control Lock – off
- ▶ Mags. – key out
- ▶ Mixture – idle cutoff
- ▶ Throttle – idle
- ▶ Avionics – off

- ▶ Fuel Shutoff – on
- ▶ Fuel – both
- ▶ Master – on
- ▶ Fuel – note
- ▶ Flaps – down
- ▶ Lights/Pitot – test
- ▶ Avionics on/off – fans
- ▶ Master – off
- ▶ Hobbs Time – note

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] [W<1.5V]
- ▶ Amps – S<D/ann on
- ▶ Pre-time:
- ▶ 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>0V]
- ▶ 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/AI/ASI<-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 – 1400 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 – 0-10°
- ▶ 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
- ▶ "CGUMPS"
- ▶ 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 (121.5)
- ▶ 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