

DA40-180 (Ted Yin v1.0)

In-Flight Operations

Pre-Takeoff

- ▶ Abort Plan/Lost Comm. lock
- ▶ Canopy/Door..... fullest
- ▶ Fuel Selector..... fullest
- ▶ Flaps..... T/0

Mixture

- ▶ Prop..... rich

- ▶ Pitot Heat..... as required
- ▶ (Air Conditioner..... off)

Review Airspeeds

- ▶ Time..... note/start

Takeoff

- ▶ "Lights, Camera, Action"

- ▶ Electric Pump..... on

- ▶ Mixture/Prop/Throttle

- ▶ Engine Inst..... green

- ▶ Vr..... 59, then..... 67-60

Safe Altitude

- ▶ Prop..... 2400 RPM

- ▶ Pump..... off

- ▶ Lights..... as required

Climb

- ▶ T/0: Vy..... 67-54 KIAS

- ▶ Cruise..... 76-60 KIAS

- ▶ Flaps..... UP

- ▶ Mixture..... rich

- ▶ >5000 hold const. EGT

- ▶ Prop..... 2400 RPM

- ▶ Throttle..... full

- ▶ Engine Inst..... green

- ▶ Trim..... as required

- ▶ High Altitude..... pump on

Cruise

- ▶ Flaps..... UP

- ▶ Throttle..... 21-24"

- ▶ Prop..... 1800-2400 RPM

- ▶ Mixture

- ▶ Economy..... max EGT, <=75%

- ▶ Best..... 100°F (59°C) lower

- ▶ Higher Power..... richen

- ▶ High Altitude..... pump on

- ▶ Flow Check (~15 min)

- ▶ Trim Switch Tanks

- ▶ Mixture/Prop/Throttle

- ▶ Flaps, Engine Inst.,

- ▶ Pump, Mag., Master

- ▶ CHT..... 150-400°F

- ▶ Oil..... 165-220°F

- ▶ Descent

- ▶ Mixture..... richen slowly

- ▶ Throttle..... as required

- ▶ Prop..... 1800-2400 RPM

- ▶ High Altitude..... pump on

- ▶ CHT Cool Down

- ▶ <= 50°F (12.8°C)/min.

Pre-Landing

- ▶ ATIS/Rwys/Approach Plan

- ▶ "CGUMPS"

- ▶ Fuel Selector

- ▶ M Mixture..... rich

- ▶ P Prop..... high RPM

- ▶ P Pump..... on

- ▶ S Seat Belts..... secure

- ▶ F Flaps..... as required

- ▶ T/0..... <108 KIAS

- ▶ LDG..... <91 KIAS

- ▶ Trim..... as required

- ▶ Lights..... as required

- ▶ Approach Speed..... 73-56

- ▶ (Air Conditioner..... off)

- ▶ Go Around

- ▶ Throttle..... full

- ▶ Vy..... 67-54 KIAS

- ▶ Flaps..... T/0

- ▶ Safe Altitude

- ▶ Prop..... 2400 RPM

- ▶ Pump..... off

- ▶ Lights..... as required

- ▶ Cruise Climb

- ▶ Post-Landing

- ▶ Throttle..... 1000 RPM

- ▶ Mixture..... lean

- ▶ Flaps..... UP

- ▶ Electric Pump..... off

- ▶ Pitot Heat..... off

- ▶ Trim..... T/0

- ▶ Lights..... as required

- ▶ Clearance..... obtain

- ▶ C0 Contamination

- ▶ Cabin Heat..... off

- ▶ Ventilation..... open

- ▶ Emergency Windows..... open

- ▶ Canopy..... open (partially,

- ▶ D0 NOT unlock rear door

- ▶ during flight)

- ▶ Engine Failure

- ▶ Short Flow

- ▶ Fuel Selector..... fullest

- ▶ Mixture..... full/check

- ▶ Pump..... on

- ▶ Alternate Air..... on

- ▶ Mags..... check all

- ▶ Glide and Trim

- ▶ Airspeed..... 76-60 KIAS

- ▶ Windmill..... 1.45m/1kft

- ▶ Stationary..... 1.7m/1kft

- ▶ Wind and Landing Site

- ▶ Longer Flow

- ▶ Engine Inst..... check

- ▶ Short Flow

- ▶ Windmill Restart

- ▶ Airspeed..... 70-80 KIAS

- ▶ Mags..... both

- ▶ Mixture..... lean then

- ▶ slowly richen

- ▶ Stationary Restart

- ▶ Airspeed..... 80 KIAS

- ▶ Electrical..... off

- ▶ Avionics..... off

- ▶ Master..... on

- ▶ Mags..... start

- ▶ Engine-off Landing

- ▶ Fuel Selector..... off

- ▶ Mixture..... idle cutoff

- ▶ Mags..... off

- ▶ Master..... off

- ▶ Belt and Seat..... check

- ▶ Flaps..... LDG (when able)

- ▶ Unlatch Door?/Brace

- ▶ Engine Fire

- ▶ Cabin Heat..... off

- ▶ Emergency Descent

- ▶ Landing is ensured

- ▶ Fuel Selector..... off

- ▶ Throttle..... full

- ▶ Pump..... off

- ▶ Master..... on

- ▶ Emergency Windows..... open

- ▶ Engine-off Landing

- ▶ Electrical Fire

- ▶ Emergency Switch..... on

- ▶ Master..... off

- ▶ Cabin Heat..... off

- ▶ Emergency Windows..... open

- ▶ Canopy..... partially

- ▶ Land ASAP