

PREFLIGHT CHECK

CABIN

- 1 Aircraft Log & Aircraft Papers CHECKED
- 2 LANE (Ignition Switch) OFF & KEY **REMOVED**
- 3 AV (Avionics Master) OFF
- 4 BAT (Master Switch) ON
- 5 Fuel Quantity (electrical & sight gauges) CHECKED (**Endurance !**)
- 6 Flaps Control Linkage..... CHECK SECURE
- 7 BAT (Master Switch) OFF

OUTSIDE

- 8 Oil check (**gurgling noise!**) & Outside Check ACCORDING AFM

PREFLIGHT CHECK COMPLETED

CHECK BEFORE ENGINE START

- 1 Cabin Doors CLOSED
- 2 Seats, Seat Belts & Shoulder Harness ADJUSTED & SECURED
- 3 Fuel Shutoff Valve OPEN
- 4 Parking Brake SET
- 5 BAT (Master Switch) ON
- 6 ACL (Anti-Collision Light) ON
- 7 Fuel Pump..... MAIN **ON** / AUX **OFF**
- 8 Circuit Breakers CHECKED IN
- 9 EMU Display (Engine Monitoring Unit) CHECKED

CHECK BEFORE ENGINE START COMPLETED

STARTING ENGINE & AFTER ENGINE START CHECK

- 1 Propeller Area & Zone behind Aircraft CLEAR
- 2 Rotate Ignition Switch **"A/B"** – short pause
- 3 Rotate Ignition Switch **"START POWER"** and...
- 4 Throttle PUSH OPEN 1cm = throttle 50%
 EMU Display: wait for **"A"** & **"B"** to switch off
- 5 Fuel Pressure..... min 3.0 bar
- 6 Rotate Ignition Switch **"START ENGINE"** (**max 10 sec**)
- 7 Oil Pressure (**not longer than 10 sec**) **GREEN**
- 8 Throttle 2 000 rpm
- 6 Engine Instruments..... CHECKED
- 7 Engine Warm Up WAIT 2 MINUTES
- 8 Generator Warning **GEN OK**
 if warning persists SET 2 800 rpm – wait and **CHECK AGAIN GEN OK**
- 10 AV (Avionics Master) ON & FREQUENCY SET
- 11 MFD (Multi-Functional Display) SET QNH

STARTING & AFTER ENGINE START CHECK COMPLETED – READY TO TAXI

TAXI CHECK

- 1 Brakes & Steering CHECKED
- 2 Gyro Instruments & Magnetic Compass CHECKED

TAXI CHECK COMPLETED

RUN UP

- 1 Parking Brake SET
- 2 Oil Temperature **min 50° C**
- 3 Zone behind Aircraft CLEAR
- 4 Throttle 3 000 rpm
- 5 Generator Warning **GEN OK**
- 6 Rotate Ignition Switch to “B” max drop 150 rpm
MONITOR EMU Display
CHECK “**LANE A**” LIGHTS UP
- 7 Rotate Ignition Switch to “A” max drop 150 rpm
MONITOR EMU Display
CHECK “**LANE B**” LIGHTS UP
- 8 Rotate Ignition Switch to “B” CHECK “**LANE A**” LIGHTS UP
- 9 Rotate Ignition Switch to “A/B” CHECK “**LANE A**” & “**B**” **OFF**
- 10 Throttle 2 000 rpm
- 11 Fuel Pressure Pressure CHECKED
- 12 Fuel “**AUX PUMP**” – ON Pressure CHECKED
- 13 Fuel “**MAIN PUMP**” – OFF Pressure CHECKED
- 14 Fuel “**MAIN PUMP**” – ON Pressure CHECKED
- 15 Throttle CHECK IDLE ($\pm 1\ 400$ rpm)
- 16 Throttle 2 000 rpm
- 17 Throttle Friction Nut (left side only) FINGER TIGHT
- 18 EMU (Engine Monitoring Unit) Power Supply min 12 V **each folder green**

RUN UP COMPLETED

CHECK BEFORE DEPARTURE

- 1 Seats, Seat Belts & Shoulder Harness (**PAX**) RECHECKED
- 2 Cabin Doors CLOSED & LATCHED
- 3 Flaps AS REQUIRED
- 4 Ignition Switch “**A/B**”
- 5 Fuel Pumps BOTH ON
- 6 Fuel Quantity CHECKED (**Endurance !**)
- 7 Elevator Trim SET FOR TAKE OFF
- 8 Circuit Breakers CHECKED
- 9 Flight Instruments CHECKED & SET
- 10 Engine Instruments CHECKED **all green**
- 11 Flight Controls FREE & CORRECT
- 12 Departure & Emergency Briefing COMPLETED
- 13 Parking Brake RELEASED

CHECK BEFORE DEPARTURE COMPLETED – READY TO LINE UP

Approach Sector & Runway FREE / ENTER THE RUNWAY & LINE UP

LINE UP CHECK

- 1 Runway IDENTIFIED & DG (CONFIRMED)
- 2 Wind CHECKED
- 3 NAV/POS (Navigation Lights) ON
- 4 Transponder SELECT **"ALT"** (7 000)
- 5 Time NOTED

LINE UP CHECK COMPLETED

CLIMB CHECK

- 1 Throttle FULL POWER (min 5 000 rpm)
- 2 Flaps UP (when clear of obstacles, +ve ROC & SPEED > 114 km/h)
- 3 Throttle (≤97%) REDUCE to FUEL FLOW 20l/h
- 4 500 ft AGL: **"AUX PUMP"** – OFF Pressure CHECKED

CLIMB CHECK COMPLETED

CRUISE CHECK

- 1 Altimeter SET AS REQUIRED
- 2 Cruise Power SET (75 – 85%) [max. 5 500 rpm] (75% [±4 500 rpm] – 85% [±4 800 rpm])
- 3 Fuel Quantity CHECKED (Endurance)
- 4 Engine Instruments **GREEN**

CRUISE CHECK COMPLETED

DESCENT CHECK

- 1 ATIS (if available) NOTED
- 2 Approach Briefing COMPLETED
- 3 Avionics SET
- 4 Cabin & PAX SECURED

DESCENT CHECK COMPLETED

APPROACH CHECK

- 1 Altimeter SET QNH (D/W Altitude)
- 2 Throttle 4 000 rpm
- 3 Fuel **"AUX PUMP"** – ON Pressure CHECKED
- 4 Fuel Quantity CHECKED (Endurance)
- 5 Engine Instruments **GREEN**

APPROACH CHECK COMPLETED

FINAL CHECK

- 1 Speed 110 km/h
- 2 Power ± 2 500 rpm
- 3 Flaps SET FOR LANDING

FINAL CHECK COMPLETED

AFTER LANDING CHECK

- 1 Transponder..... SELECT **“SBY”**
- 2 Fuel **“AUX PUMP”** OFF
- 3 Flaps UP
- 4 Elevator Trim..... SET FOR TAKE OFF

AFTER LANDING CHECK COMPLETED

PARKING & ENGINE SHUT DOWN

- 1 Parking Brake SET AS REQUIRED
- 2 Throttle **2 000 rpm**
- 3 COM..... MONITOR 121.50
- 4 AV (Avionics Master) OFF
- 5 Electrical Consumers (except **ACL**) OFF
- 6 Throttle IDLE
- 7 Ignition Switch (± 2 minutes after the landing)..... **OFF & KEY REMOVED**
- 8 Master Switch OFF
- 9 ACL (Anti-Collision Light) OFF
- 10 Flight Data & Aircraft Log NOTED

PARKING & ENGINE SHUT DOWN CHECK COMPLETED

EMERGENCY

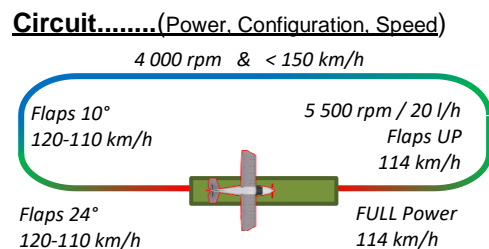
- i **“Lane A” or “Lane B” steady ON:**land ASAP
- ii **“Lane A” flashing ON:**.....set 3 000 rpm / Ignition Switch **“B”** / **“LANE A”** should light up / Ignition Switch **“A/B”** / warning lights **OFF**
- iii **“Lane B” flashing ON below 5 000 ft AGL:**land ASAP
- iv **“Lane B” flashing ON above 5 000 ft AGL:**set 4 000 rpm / speed > 140 km/h / Ignition Switch **“B”** (for 2 sec) / then continue as below
 - iv-1 **if prop stopped:** perform re-start (see page 1, lower half)
 - iv-2 **if prop wind milling:** ignition switch on **“A”** ▶ **“B”** ▶ **“A/B”**, check voltage >13.2 V

Important Data for LightWing AC4 (according AFM) check T/O performance according AFM

V_R (Rotating speed)**95 km/h**
V_X (Best angle of climb speed).....**85 km/h**
V_Y (Best rate of climb speed).....**108 km/h**
V_A (Manoeuvring speed).....**176 km/h**
V_G (Best glide speed) (**clean**).....**110 km/h**
V_{NO} (Max. structural speed).....**176 km/h**
V_{NE} (Never exceed speed).....**210 km/h**
V_{FE} (Max. flaps extend speed)**165 km/h**
V_S (Stalling speed - clean).....**82 km/h**
V_{SO} (Stalling speed - full flap)**76 km/h**
Max. Crosswind**10 kt**
Service Ceiling.....**12 000 ft**

Weights
MTOW 600 kg
Empty weight 386 kg
Max. useful load..... 214 kg
Fuel (MOGAS 95 / 98)
Max. capacity 94 l
Usable fuel..... 90 l
Fuel flow (average)..... 15 l/h
Oil (15W40 Sport)
Max. capacity 3.0 l
Min. quantity..... 2.5 l

Power settings
 Climb power≤97% (5 500 rpm, 20 l/h)
 Cruise power..... 75% - 85%
 (4 500 – 4 800 rpm)



Corrections: Power settings added