

## **C - 172      CHECK LIST      LN-ASY**

rev. 01.05.2007

### **A. BEFORE STARTING ENGINE.**

- Preflight Inspection ..... - COMPLETE
- Papers ..... - CHECKED
- Flight Controls ..... - FREE and CORRECT
- Seats, Belts, Shoulder Harnesses - ADJUST and LOCK
- Radios ..... - OFF
- El. Equipment ..... - OFF
- Brakes ..... - TEST and SET
- Circuit Breakers ..... - CHECK IN
- Startup Clearance ..... - RECEIVED

\* Night Flight : SEE LAST PAGE

### **B. STARTING ENGINE.**

- Master Switch ..... - ON
- Fuel Quantity ..... - CHECKED, Reading .....
- Fuel Selector ..... - BOTH
- Mixture ..... - RICH
- Carburetor Heat ..... - COLD
- Prime ..... - AS REQUIRED (0 - 6 strokes)
- Throttle ..... - OPEN 1/4 INCH (When Hot: 2 – 3 mm)
- Rotating Beacon ..... - ON
- Propeller Area ..... - CLEAR
- Ignition Switch ..... - START
- Oil Pressure ..... - CHECK GREEN (within 30 sec.s)
- Throttle ..... - 800 RPM, when cold

### **C. AFTER START CHECK.**

- Throttle ..... - 1.200 RPM
- Radios ..... - ON (as required)
- Transponder ..... - STANDBY (7000 ?)
- Gyros ..... - SET
- Lights ..... - ON AS NECESSARY
- ATIS ..... - RECEIVE (if avail.)
- Taxi Clearance ..... - REQUEST
- Altimeter(s) ..... - SET
- Brakes ..... - RELEASE

### **D. TAXI.**

- Brakes ..... - CHECK , both sides
- Gyros ..... - CHECK OPERATION

### **E. ENGINE RUNUP.**

- Brakes ..... - SET
- Warm Up at ..... - 1200 RPM
- Throttle ..... - 1700 RPM
- Suction ..... - CHECK, ca 5"
- Oil Pressure ..... - CHECK
- Oil Temperature ..... - CHECK
- Alternator ..... - CHECK
- Carburetor Heat ..... - CHECK FOR DROP, THEN COLD
- Magnetos ..... - CHECK : Max. drop : 125 RPM  
Max. diff.: 50 RPM
- Throttle ..... - IDLE, THEN 1200 RPM
- Engine Failure Briefing - PERFORMED

## **F. BEFORE TAKE-OFF.**

- Flight Controls ..... - FREE
- Fuel Selector Valve ..... - BOTH
- Elevator Trim ..... - SET for TAKEOFF
- Mixture ..... - RICH (below 3.000 ft)
- Carburetor Heat ..... - COLD
- Wing Flaps ..... - AS REQUIRED
- Flight Instruments ..... - CHECK and SET (ASI,VSI)
- Lights ..... - ON as REQUIRED
- Cabin Doors, Windows - LOCKED
- Seat Belts ..... - FASTENED
- Radio ..... - STATE INTENSIONS / CLEARANCE
- Transponder ..... - ALTITUDE

## **TAKE - OFF.**

### **G. NORMAL TAKE-OFF.**

- Gyro ..... - CHECK RWY heading
- Landing lights ..... - ON
- Wing Flaps ..... - UP
- Throttle ..... - FULL
- Elevator Control ..... - LIFT NOSE WHEEL (at 55 KIAS)
- Climb Speed ..... - 73 KIAS (75-85 KIAS)

### **G2. MAXIMUM PERFORMANCE TAKE-OFF.**

- Wing Flaps ..... - UP
- Brakes ..... - APPLY
- Throttle ..... - FULL OPEN
- Brakes ..... - RELEASE
- Elevator Control ..... - SLIGHTLY TAIL LOW
- Climb Speed ..... - 59 KIAS (until clear of obstacles)

## **H. NORMAL CLIMB.**

- Airspeed ..... - 80 KIAS
- Landing lights ..... - OFF
- Throttle ..... - FULL OPEN
- Mixture ..... - FULL RICH (lean above 3.000 ft)
- Engine instr. .... - CHECKED

## **H2. ENROUTE CLIMB.**

- Airspeed ..... - 90 KIAS
- Landing lights ..... - OFF
- Throttle ..... - FULL OPEN
- Mixture ..... - FULL RICH (lean above 3.000 ft)
- Engine instr. .... - CHECKED

## **I. CRUISE.**

- Power ..... - 2200 - 2700 RPM (max. 75 %)
- Elevator Trim ..... - ADJUST
- Mixture ..... - LEAN (above 3.000 ft)
- Fuel Selector ..... - FULLEST TANK (L or R)
- Engine instr. .... - CHECKED

## **J. DESCENT.**

- ATIS ..... - RECEIVE
- Altimeter(s) ..... - QNH SET, Reading .....
- Mixture ..... - RICH
- Power ..... - 2.000 RPM / AS DESIRED
- Carburetor Heat .... - AS REQUIRED (prevent icing)

#### **K. BEFORE LANDING.**

- Seat Belts ..... - FASTENED
- Fuel Selector Valve.. - BOTH
- Mixture ..... - RICH
- Carburetor Heat ..... - ON
- Landing lights ..... - ON
- Magnetos ..... - BOTH
- Airspeed ..... - 60 - 70 KIAS (flaps UP)
- Wing Flaps ..... - AS DESIRED
- Airspeed ..... - 55 - 65 KIAS (flaps DOWN)

#### **L. BALKED LANDING.**

- Throttle ..... - FULL OPEN
- Carburetor Heat ..... - COLD
- Wing Flaps ..... - 20°
- Airspeed ..... - 55 KIAS
- Wing Flaps ..... - RETRACT SLOWLY

#### **M. NORMAL LANDING.**

- Touchdown ..... - MAIN WHEELS FIRST
- Landing Roll ..... - LOWER NOSE WHEEL GENTLY
- Braking ..... - MINIMUM REQUIRED

#### **N. AFTER LANDING.**

- Carburetor Heat ..... - COLD
- Wing Flaps ..... - UP
- Landing Time ..... - CHECK
- Transponder ..... - STANDBY
- Landing lights ..... - OFF

#### **O. STOPPING ENGINE.**

- Parking Brake ..... - ON
- Throttle ..... - 1200 RPM
- Radios, El. eq, ..... - OFF
- Mixture ..... - IDLE CUT-OFF
- Ignition Switch ... - OFF, Key Out
- Master Switch ..... - OFF
- Lights ..... - OFF
- Control Lock ..... - INSTALL
- Logbook

- Flight Plan ..... - CLOSED ??

#### **\* NIGHT FLYING, PREFLIGHT CHECK.**

- Master Switch ..... - ON
- Anti Coll. Lights ..... - CHECK
- Nav. Lights ..... - CHECK
- Landing -, Taxi lights - CHECK
- Interior Lights ..... - CHECK
- Flash Light ..... - CHECK AVAILABLE

**EMERGENCY                  CHECK LIST                  EMERGENCY**

## 1. ENGINE FAILURES

## 1.1 ENGINE FAILURE DURING TAKE-OFF RUN

- Throttle ..... - IDLE
- Brakes ..... - APPLY
- Wing Flaps ..... - RETRACT
- Mixture ..... - IDLE CUT-OFF
- Ignition Switch... - OFF
- Master Switch ... - OFF

## 1.2 ENGINE FAILURE IMMEDIATELY AFTER TAKE-OFF

- Airspeed ..... - 65 KIAS (flaps UP)  
                             - 60 KIAS (flaps DOWN)
- Mixture ..... - IDLE CUT-OFF
- Fuel Selector Valve - OFF
- Ignition Switch ..... - OFF
- Wing Flaps ..... - AS REQUIRED
- Master Switch ..... - OFF

### 1.3 ENGINE FAILURE DURING FLIGHT

- Airspeed ..... - 65 KIAS
- Carburetor Heat ..... - ON
- Fuel Selector Valve - BOTH
- Mixture ..... - RICH
- Ignition Switch ..... - BOTH
- (or START if prop. is stopped)
- Primer ..... - IN and LOCKED

## 2. FORCED LANDINGS

## 2.1 EMERGENCY LANDING WITHOUT POWER

- Airspeed ..... - 65 KIAS (flaps UP)  
   - 60 KIAS (flaps DOWN)
- Mixture ..... IDLE CUT-OFF
- Fuel Selector Valve     - OFF
- Ignition Switch ..... - OFF
- Wing Flaps ..... AS REQUIRED
- Master Switch ..... - OFF
- Doors ..... UNLATCH PRIOR TO TOUCHDOWN
- Touchdown ..... - SLIGHTLY TAIL LOW
- Brakes ..... - APPLY HEAVILY

## 2.2 PRECAUTIONARY LANDING WITH ENGINE POWER

- Wing Flaps ..... - 20°
- Airspeed ..... - 60 KIAS
- Selected Field ..... - FLY OVER, note obstructions
- Radio and Elect. eq. - OFF
- Wing Flaps ..... - 40° (on final)
- Airspeed ..... - 60 KIAS
- Master Switch ..... - OFF
- Doors ..... - UNLATCH PRIOR TO TOUCHDOWN
- Touchdown ..... - SLIGHTLY TAIL LOW
- Ignition Switch ..... - OFF
- Brakes ..... - APPLY HEAVILY

## **2.3 DITCHING**

- Radio ..... - MAYDAY , MAYDAY , MAYDAY ....
- Flaps ..... - 20 - 40 °
- Power ..... - ESTABLISH 300 ft/min DESCENT,  
55 KIAS
- Approach ,High Winds - INTO THE WIND  
Heavy Swells - PARALLEL TO THE SWELLS
- Cabin Doors ..... - UNLATCH
- Touchdown ..... - LEVEL ATTITUDE AT  
ESTABLISHED DESCENT
- Face ..... - CUSHION at touchdown
- Airplane ..... - EVACUATE
- Life Vests / Rafts ..... - INFLATE

## **3. FIRES**

### **3.1 ENGINE FIRE DURING START ON GROUND**

- Cranking ..... - CONTINUE

If engine starts:

- Power ..... - 1700 RPM for a few minutes
- Engine ..... - SHUTDOWN and inspect for damage

If engine fails to start:

- Throttle ..... - FULL OPEN
- Mixture ..... - IDLE CUT-OFF
- Cranking ..... - CONTINUE for 2-3 min.
- Fire extinguisher ... - OBTAIN
- Master Switch ..... - OFF
- Ignition Switch ..... - OFF
- Fuel Shutoff Valve - OFF
- Fire ..... - EXTINGUISH
- Fire damage ..... - INSPECT

### **3.2 ENGINE FIRE IN FLIGHT**

- Mixture ..... - IDLE CUT-OFF
- Fuel Selector Valve - OFF
- Master Switch ..... - OFF
- Cabin Heat and Air - OFF (except overhead vents)
- Airspeed ..... - 100 KIAS
- Forced Landing ..... - EXECUTE

### **3.3 ELECTRICAL FIRE IN FLIGHT**

- Master switch ..... - OFF
- All Other Switches .... - OFF (except IGNITION)
- Vents/Cabin air/Heat - CLOSED
- Fire Extinguisher ..... - ACTIVATE

If fire appears out and el. power

is necessary for continuance:

- Master Switch ..... - ON
- Circuit Breakers ..... - CHECK for faulty circuit,  
do not reset
- Radio/El. Switches ... - ON one at a time, with delay after each  
until short circuit is localized
- Vents/Cabin air/Heat - OPEN when it is ascertained that  
fire is completely extinguished.

### **3.4 CABIN FIRE**

- Master Switch ..... - OFF
- Vents/Cabin air/Heat - CLOSED
- Fire Extinguisher ..... - ACTIVATE
- Cabin ..... - VENTILATE
- Airplane ..... - LAND AS SOON AS POSSIBLE

### **3.5 WING FIRE**

- Navigation Light Switch... - OFF
  - Pitot Heat Switch ..... - OFF
  - Strobe Lights ..... - OFF
- SIDESLIP to keep the flames away from fuel tank and cabin.  
Land as soon as possible.

### **4. LANDING WITH A FLAT MAIN TIRE**

- Approach ..... - NORMAL
- Touchdown ..... - GOOD TIRE FIRST, hold airplane  
off flat tire as long as possible.

### **5. ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTIONS**

#### **5.1 OVER-VOLTAGE LIGHT ILLUMINATES**

- Master Switch ..... - OFF (both sides)
- Master Switch ..... - ON
- Over-Voltage Light - OFF

If over-voltage light illuminates again :

- Flight ..... - TERMINATE AS SOON AS POSSIBLE

#### **5.2 AMMETER SHOWS DISCHARGE**

- Alternator ..... - OFF
- Non-essential El. eq. - OFF
- Flight ..... - TERMINATE AS SOON AS PRACTICAL

### **6. INADVERTENT ICING ENCOUNTER**

- Pitot Heat ..... - ON
- Flight ..... - 180° TURN / DESCEND
- Cabin Heat ..... - FULL OUT
- Throttle ..... - INCREASE RPM
- Carb. Heat ..... - AS REQUIRED
- Landing ..... - AT NEAREST AIRPORT
- Flaps ..... - 0° (RETRACTED)
- Open Window ..... - SCRAPE ICE FROM WINDSHIELD
- Approach ..... - WITH FORW. SLIP (VISIBILITY)
- Approach Speed .... - 65-75 KIAS (depending on ice)
- Landing ..... - LEVEL ATTITUDE

### **7. STATIC SOURCE BLOCKAGE**

- Alternate Static Source - PULL ON
- Airspeed ..... - CONSULT APP. CALIBR. TABLE