


**FLIGHT DECK PREPARATION**

- |    |                          |                    |
|----|--------------------------|--------------------|
| 1  | Outside check.....       | COMPLETED          |
| 2  | Airplane papers.....     | ABOARD and CHECKED |
| 3  | Magnetos.....            | OFF                |
| 4  | Gear lever.....          | DOWN               |
| 5  | Propeller.....           | HIGH RPM           |
| 6  | Electrical switches..... | OFF                |
| 7  | Circuit breakers.....    | CHECKED            |
| 8  | Cowl flaps.....          | OPEN               |
| 9  | Master switch.....       | ON                 |
| 10 | Fuel check:              |                    |
|    | • Quantity.....          | CHECK ENDURANCE    |
|    | • Fuel valve.....        | BOTH               |
|    | • Mixture.....           | FULL RICH          |

**BEFORE ENGINE START**

- |   |                          |          |
|---|--------------------------|----------|
| 1 | Doors.....               | CLOSED   |
| 2 | Parking brake.....       | SET      |
| 3 | Seat belts.....          | ON       |
| 4 | ATIS (if available)..... | RECEIVED |

**ENGINE START**

- |   |  |                                  |
|---|--|----------------------------------|
| 1 | Beacon light.....  | ON                               |
| 2 | Carburetor heat.....   | OFF (COLD)                       |
| 3 | Primer (cold engine only).....   | PUMP according OAT, then LOCKED  |
| 4 | Throttle.....  | OPEN 5 mm (Pump acc. eng.-temp.) |
| 5 | Auxiliary fuel pump.....   | ON during hot engine start only  |
| 6 | Propeller area.....  | CLEAR                            |
| 7 | Ignition key.....  | START                            |
|   |  - when engine starts, release starter immediately!!! |                                  |
|   | - do not crank for more than 10 sec, then wait for minimum 20 sec. to cool down!   |                                  |
|   | After 6 times, wait for 30 min.!   |                                  |
| 8 | Throttle.....  | 1000 RPM                         |
| 9 | Oil pressure.....  | CHECKED                          |

**AFTER ENGINE START**

- |   |                                 |                            |
|---|---------------------------------|----------------------------|
| 1 | Avionic switch.....             | ON                         |
| 2 | Transponder set mode "ALT"..... | CHECK "GND" and "VFR 7000" |
| 3 | Avionics and audio panel.....   | SET & CHECK                |
| 4 | Flight instruments.....         | CHECKED                    |
| 5 | Lights.....                     | AS REQUIRED                |

**TAXI CHECK**

- |   |                          |         |
|---|--------------------------|---------|
| 1 | Brakes and steering..... | CHECKED |
| 2 | Instruments.....         | CHECKED |

**RUN UP CHECK**

- 1 Parking brake ..... SET
- 2 Run up:
  - Throttle ..... 1800 RPM
  - Magnetos..... CHECKED (max drop 150 RPM)
  - Carburetor heat ..... CHECKED
  - Propeller..... CYCLE TWICE
  - Alternator ..... CHECKED
  - Gyro suction ..... CHECKED
  - Throttle idle..... CHECK RPM
  - Throttle ..... 1000 RPM

**BEFORE DEPARTURE**

- 1 Flight controls ..... FREE & CORRECT
- 2 Trim ..... CHECKED & SET
- 3 Flaps..... SET (0° - 10°)
- 4 Fuel check:
  - Quantity ..... CHECK ENDURANCE
  - Fuel valve ..... BOTH
  - Mixture..... FULL RICH or BEST POWER
- 5 Carburetor heat ..... OFF (COLD)
- 6 Propeller..... HIGH RPM
- 7 Friction ..... SET
- 8 Doors and windows ..... CLOSED
- 9 Take off briefing ..... COMPLETED

**LINE UP**

- 1 Approach ..... CLEAR
- 2 Wind ..... CHECKED
- 3 Lights ..... AS REQUIRED (ON)
- 4 Transponder ..... AUTOMATIC (VFR 7000)
- 5 Time check..... PERFORM

**CLIMB CHECK**

- 1 Gear ..... UP
- 2 Flaps..... UP
- 3 Climb power..... SET
- 4 Lights ..... AS REQUIRED
- 5 Mixture ..... SET
- 6 Cowl flaps ..... OPEN

**CRUISE CHECK**

- 1 Altimeter..... SET
- 2 Directional gyro ..... COMPARED
- 3 Power ..... SET
- 4 Mixture ..... SET
- 5 Engine instruments..... CHECKED
- 6 Fuel quantity..... CHECKED

**DESCENT CHECK**

- |          |   |                     |
|----------|---|---------------------|
| <b>A</b> | <b>Atis</b> .....                       | NOTED               |
| <b>B</b> | <b>Briefing</b> .....                   | COMPLETED           |
| <b>C</b> | <b>Circuit breakers and cabin</b> ..... | CHECKED AND SECURED |
| <b>D</b> | <b>Directional gyro</b> .....           | SET                 |
| <b>E</b> | <b>Electric equipment</b> .....         | AS REQUIRED         |
| <b>F</b> | <b>Fuel (mixture)</b> .....             | SET FOR DESCENT     |

**APPROACH**

- |          |                              |                                     |
|----------|------------------------------|-------------------------------------|
| <b>1</b> | <b>Altimeter</b> .....       | SET QNH                             |
| <b>2</b> | <b>Fuel check:</b>           |                                     |
|          | • <b>Quantity</b> .....      | CHECK ENDURANCE                     |
|          | • <b>Fuel valve</b> .....    | BOTH                                |
|          | • <b>Mixture</b> .....       | FULL RICH (except high field elev.) |
| <b>3</b> | <b>Carburetor heat</b> ..... | ON (HOT)                            |
| <b>4</b> | <b>Landing light</b> .....   | ON                                  |
| <b>5</b> | <b>Gear</b> .....            | DOWN / CHECK GREEN LIGHT            |
| <b>6</b> | <b>Flaps</b> .....           | 10°                                 |

**FINAL CHECK**

- |          |                        |          |
|----------|------------------------|----------|
| <b>1</b> | <b>Gear</b> .....      | CHECKED  |
| <b>2</b> | <b>Propeller</b> ..... | HIGH RPM |
| <b>3</b> | <b>Flaps</b> .....     | SET      |
| <b>4</b> | <b>Speed</b> .....     | CHECKED  |

**AFTER LANDING**

- |          |                              |             |
|----------|------------------------------|-------------|
| <b>1</b> | <b>Transponder</b> .....     | CHECK "GND" |
| <b>2</b> | <b>Flaps</b> .....           | UP          |
| <b>3</b> | <b>Carburetor heat</b> ..... | OFF (COLD)  |
| <b>4</b> | <b>Lights</b> .....          | AS REQUIRED |
| <b>5</b> | <b>Time check</b> .....      | PERFORM     |
| <b>6</b> | <b>Cowl flaps</b> .....      | OPEN        |

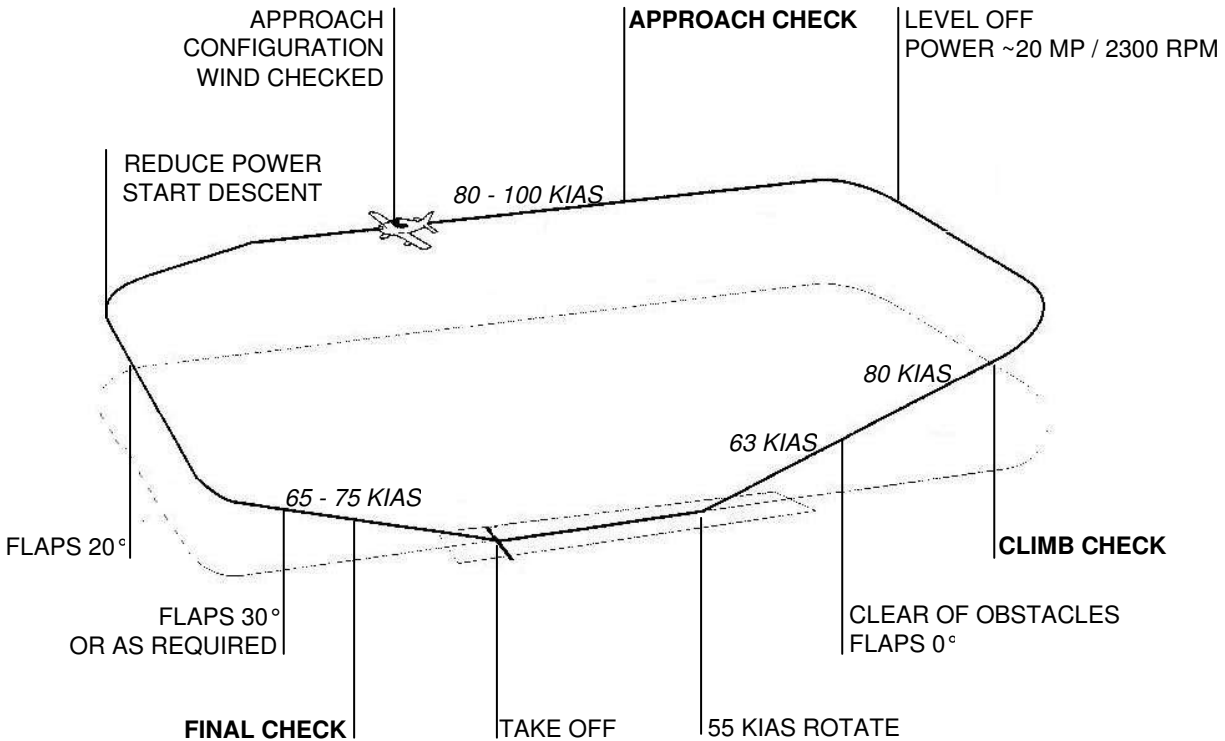
**PARKING**

- |          |   |              |
|----------|---|--------------|
| <b>1</b> | <b>Parking brake</b> .....                | AS REQUIRED  |
| <b>2</b> | <b>Avionic and electrical switches</b> .. | OFF          |
| <b>3</b> | <b>Throttle</b> .....                     | SET 1000 RPM |
| <b>4</b> | <b>Mixture</b> .....                      | IDLE CUT OFF |
| <b>5</b> | <b>Magnetos and master switch</b> .....   | OFF          |
| <b>6</b> | <b>Flight Log /Tech Log</b> .....         | FILL OUT     |

**SPEEDS**

- |                |                            |                                    |
|----------------|----------------------------|------------------------------------|
| $V_X$          | Best angle of climb.....   | 63 KIAS                            |
| $V_Y$          | Best rate of climb .....   | 84 KIAS (sea level)                |
|                | .....                      | 75 KIAS (12'000 ft)                |
| $V_{FE}$       | max. Flaps speed.....      | 10°: max. 130 / > 10°: max.85 KIAS |
| $V_{best\ G.}$ | Best glide (0° Flaps)..... | 73 KIAS                            |

CIRCUIT



For explanation refer to the Expanded Checklist