

Personal Check List – A152

- Clear vision
- No illness, cold, etc
- No alcoholic drink within 24 hours
- Medical valid
- Certificate valid
- No other reason

I'm Safe Check List

- **Illness:** Do I have an illness or any symptoms of an illness?
- **Medication:** Have I been taking prescription or over-the-counter drugs?
- **Stress:** Am I under psychological pressure from the job? Worried about financial matters, health problems or family discord?
- **Alcohol:** Have I been drinking within eight hours? Within 24 hours?
- **Fatigue:** Am I tired and not adequately rested?
- **Eating:** Am I adequately nourished?
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Passenger Check List and Briefing

- No illness, cold, etc.
- No alcoholic drink within 8 hours
- Travel sickness?
- Rules:
 - Seat belts – how to fasten/operate/release – always fastened.
 - Hands-off controls
 - Keep quiet when asked
 - Always tell me when see another aircraft – more eyes better!
- Emergency actions:
 - I will fly the plane – hands-off.
 - Door operation/handle and door removal.
 - Kick-out windows if necessary to exit
 - Crack open door a 10-20' feet before landing
 - Wait until plane stops – then leave 45o to the rear.
 - Location of survival gear & content
- Questions?

Hazardous Attitudes:

I'm Air:

- I: Invulnerable:** Can't happen to me
Could happen to me.
- M: Macho:** Showing off – taking chances.
Taking chances is foolish.
- A: Anti-Authority:** The rules are wrong or stupid.
Obey the rules, they are usually right.
- I: Impulsiveness:** Have to take some action – quickly.
Take time to think through and plan
- R: Resignation:** I can't do anything to change the situation.
I'm not helpless – I can make a difference.

PAVE – Risk Factors:

Pilot:

Airplane:

enVironment:

External:

Pre-Flight Review:

- **Take-off speeds – especially if doing performance take-off.**
- **Review take-off ground roll and clearance.**
- **Review departure direction, procedures, altitudes, airspace, etc.**

- **Review Emergency Procedures**

Airplane Pre-Flight Check List – A152

A. Cabin

- Control Lock: - REMOVE
- Magneto switch: - OFF
- Master switch: - ON
- Fuel gauges: - CHECK FUEL
- Fuel selector: - ON
- Flaps: - FULLY EXTEND
- Lights: - CHECK
 - Beacon
 - Landing light
 - Position lights
 - Strobes
- Master switch: - OFF

B. Documentation

- Personal:
 - Medical
 - Pilot Certificate
- ARROW:
 - Airworthiness certificate
 - Registration
 - Radio license (if going international)
 - PoH or airplane information manual
 - Weight and balance data (Equip list, weights and arms)

C. Right Wing

- Wing root: - CHECK INTEGRITY
- Wing Surface: - CHECK FOR DAMAGE
- Flap: - LOCKED IN PLACE
 - Hinges:- CHECK FOR PLAY & LOCK WIRE
- Aileron: - FULL & FREE MOVEMENT
 - Hinges:- CHECK FOR PLAY & LOCK WIRE
- Wing Tip: - CHECK FOR DAMAGE
- Leading edge: - CHECK FOR DAMAGE
- Lift spar: - CHECK FOR INTEGRITY
- Landing Gear: - CHECK FOR INTEGRITY
 - Tire: - INFLATION & CONDITION
 - Brakes: - PAD WEAR – PIPE FITTINGS.
- Wing tie down: - REMOVE
- Chocks: - REMOVE

D. Nose Section

- Engine oil: - AT LEAST 4 QTS – MAX 6 QTS
- Cowling: - FASTENERS SECURE
- Exhaust Stub: - SECURE
- Nose wheel: - CHECK FOR INTEGRITY
 - Tire: - INFLATION & CONDITION
 - Linkages: - NO PLAY & LOCKED
 - Strut: - CHECK INFLATION & ACTION
- Propeller: - LEADING EDGE FOR NICKS
- Spinner: - CHECK FOR INTEGRITY
- Carb air filter: - CHECK CLEAR & CLEAN
- Alternator belt: - TENSION & CONDITION
- Oil cooler: - CHECK CLEAR & CLEAN
- Starter ring: - NO MISSING TEETH
- Engine: - CLEAR OF OBSTRUCTIONS

E. Left Wing

- Static source: - CLEAR OF OBSTRUCTIONS
- Wing root: - CHECK INTEGRITY
- Lift spar: - CHECK FOR INTEGRITY
- Landing Gear: - CHECK FOR INTEGRITY
 - Tire: - INFLATION & CONDITION
 - Brakes:- PAD WEAR - PIPE FITTINGS.
- Pitot tube: - PITOT & DRAIN CLEAR
- Stall warning: - CLEAR OBSTRUCTIONS&OPERATION
- Fuel vent: - CLEAR OF OBSTRUCTIONS
- Leading edge: - CHECK FOR DAMAGE
- Wing Surface: - CHECK FOR DAMAGE
- Wing Tip: - CHECK FOR DAMAGE
- Aileron: - FULL & FREE MOVEMENT
 - Hinges:- CHECK FOR PLAY & LOCK WIRE
- Flap: - LOCKED IN PLACE
 - Hinges:- CHECK FOR PLAY & LOCK WIRE
- Wing tie down: - REMOVE
- Chocks: - REMOVE

F. Empennage (Tail)

- Control surfaces: - CHECK FOR DAMAGE
- Control surfaces: - FULL & FREE MOVEMENT
- Hinges: - CHECK FOR PLAY & LOCK WIRE
- Tie Down: - REMOVE

G. Fuselage

- Top: - CHECK FOR DAMAGE
- Under: - CHECK FOR DAMAGE & OIL

H. Fuel

- Sample wings: - CHECK CONTAMINATION/COLOR
- Fuel strainer: - DRAIN AND CHECK FOR WATER
- Fuel levels: - VISUAL CHECK
- Fuel caps: - SECURE
- Upper wing: - CHECK SURFACES FOR DAMAGE

Before Engine Start

- Pre-flight: - COMPLETE
- Cabin secure:
 - Seats: - ADJUSTED AND LOCKED
 - Seat belts: - FASTENED AND ADJUSTED
 - Doors: - CLOSED AND LATCHED
- Fuel selector: - ON
- Master switches: - ALT & BATT ON
- Electrical equipment:
 - Lights: - BEACON ON
 - Radios: - OFF
 - Breakers/fuses: - CHECK OK
- Brakes (1): - TEST PRESSURE & ACTION
- Brakes (2): - APPLY

Engine Start

- Mixture: - RICH
- Carb Heat: - OFF (COLD)
- Prime: - PUMP & LOCK
- Throttle: - OPEN ½” – 1”
- Visual area check: - SCAN FOR PEOPLE & VEHICLES
- Verbal area clear: - SHOUT “CLEAR PROP”
- Throttle: - HAND ON THROTTLE
- Ignition switch: - START ENGINE & RELEASE
- Engine gauges: - CHECK OIL PRESSURE - GREEN
- Throttle: - ADJUST TO 1000RPM
- Mixture: - LEAN FOR GROUND OPERATIONS
- Engine gauges: - CHECK TEMP & PRESSURE – GREEN
- Radios and transponder:
 - Radio: - ON
 - Intercom: - ON
 - Transponder: - ALT and SQUAWK CODE
- Flaps: - RETRACT AND CONFIRM
- Brakes: - BRAKE TEST

Pre-Taxi

- AWOS/ATIS: - RECORD DATA
- Altimeter: - SET
- Heading Indic: - SET TO COMPASS
- Other Instr: - CHECK FOR ZERO/OPERATION
- Radio: - SET TO GND FREQ or CTAF.
- Engine gauges: - GREEN
- Taxi Clearance: - CALL GND FOR TAXI CLEARANCE

During Taxi

- Brakes: - BRAKE TEST
- ASI: - CHECK ZERO
- VSI: - CHECK ZERO
- AI: - SET & CHECK
- Turn Indic: - CHECK
- Heading Indic: - SET TO COMPASS

Before Take-Off Run Up

- Aircraft: - ALIGNED INTO WIND
- Nose wheel: - STRAIGHT AHEAD
- Brakes: - ON AND HOLDING
- Cabin secure: - PHYSICALLY CHECK FOLLOWING:
 - Seat belts: - FASTENED AND ADJUSTED
 - Doors: - CLOSED AND LOCKED
 - Windows: - CLOSED AND LATCHED
- Controls: - CORRECT, FULL & FREE MOVEMENT
- Flight instruments:-SET AND OPERATIONAL
- Fuel selector: - ON
- Mixture: - RICH
- Elevator trim: - SET TO TAKE-OFF POSITION
- Engine run-up:
 - Throttle: - SET 1700RPM
 - Engine gauges:- CHECK PRESSURE & TEMP – GREEN
 - Heat check: - HEAT ON–CHK RPM DROP-HEAT OFF
 - Mag check: - LEFT & RIGHT <125RPM DROP (Δ <50)
 - Ammeter(1): - CHECK CHARGING
 - Ammeter(2): - ALT OFF – LOW VOLTAGE LIGHT ON
 - Ammeter(3): - ALT ON – LOW VOLTAGE LIGHT OFF
 - Suction gauge:-GREEN
- Idle carb heat check:
 - Throttle: - IDLE
 - Heat: - ON (HOT). CONFIRM RPM DROP
 - Heat: - OFF (COLD). RPM INCREASE
- Throttle: - INCREASE TO 1000RPM
 - Friction lock: - ADJUST
- Radio: - SET TO TOWER OR CTAF
- Transponder: - CHECK SET TO ALT
- Lights:
 - Landing lights: - ON
 - Position lights:- AS NEEDED
- Procedures: - REVIEW TO & EMERG PROCEDURES
- Brakes: - RELEASE
- Position: - HOLD AT RNWY HOLD LINE
- Radio: - CALL TWR OR SELF-CLR ON CTAF

NORMAL TAKE OFF AND LANDING PROCEDURES – A152

Normal Take-Off

- Flaps: - RETRACTED (0 degrees)
- Carb. Heat: - OFF (COLD)
- Throttle: - FULL OPEN
- Rotate nose: - V_R AT 50Kts
- V_Y Climb: - 67 Kts

En-Route Climb

- Throttle: - FULL OPEN
- Mixture: - RICH; LEAN FOR RPM > 3,000'
- Flaps: - RETRACTED AT >100', >60Kts
- V_Y Climb: - 67 Kts
- Cruise Climb: -75 Kts
- Engine gauges: - GREEN
- Crosswind turn: - Above 500' AGL

Max. Rate Climb

- Throttle: - FULL OPEN
- Mixture: - RICH; LEAN FOR RPM > 3,000'
- Airspeed V_y : - 67Kts (See PoH Section 5).

Cruise

- Throttle: - 2100-2440RPM
- Trim: - ADJUST
- Mixture: - LEAN FOR RPM
- Heading Indic: - SET TO COMPASS
- Engine gauges: - GREEN

Inbound/Decent

- Fuel selector: - ON
- Mixture: - RICH
- Carb. Heat: - ON (HOT)
- Engine gauges: - GREEN
- Magnetos: - BOTH
- Master Switches: - ALT & BATT ON
- Primer: - IN & LOCKED
- Lights: - LANDING LIGHT ON
- ATIS: - RECORD DATA
- Altimeter: - SET
- Heading Indic: - SET TO COMPASS
- Radio: - SET TO TWR/CTAF – CALL “INBOUND”
- Power: - CLEAR ENGINE

Before Landing

- Cabin secure:
 - Seat belts: - FASTENED AND ADJUSTED
 - Doors: - LOCKED & LATCHED
 - Windows: - CLOSED AND LATCHED
- Fuel selector: - ON (BOTH)
- Mixture: - RICH
- Carb. Heat: - ON (HOT)
- Engine gauges: - GREEN
- Magnetos: - BOTH
- Master Switches: - ALT & BATT ON
- Primer: - IN & LOCKED
- Radio: - CALL TWR FOR CLEARANCE
OR SELF CLEAR ON CTAF

Normal Landing

- Airspeed: - 65-70Kts. FLAPS UP
- Flaps: - AS APPROP (<85Kts.)
- Airspeed: - 55-60Kts. FLAPS DOWN
- Touchdown: - MAIN WHEELS FIRST, YOKE BACK
- Roll: - LOWER NOSE GENTLY
- Braking: - MIN NECESSARY

Go Around

- Throttle: - FULL OPEN
- Carb. Heat: - OFF (COLD)
- Flaps: - RETRACT TO 20°
- Pitch: - PITCH FWD FOR AIRSPEED >55Kts.
- Flaps: - RETRACT INCREMENTALLY

After Landing – Option

- Carb. Heat: - OFF (COLD)
- Flaps: - RETRACTED

After Landing – Full Stop

- Carb. Heat: - OFF (COLD)
- Flaps: - RETRACTED
- Mixture: - LEAN
- Lights: - LANDING LIGHT OFF
- Radio: - CALL TWR/GND FOR TAXI

Secure Aeroplane

- Throttle: - 1000 RPM
- Brakes: - SET
- Radio and inter: - OFF
- Transponder - OFF
- Ignition check: - OFF & ON TO CHECK P-GROUNDING
- Mixture: - IDLE CUT-OFF (STOP ENGINE)
- Ignition switch: - OFF & REMOVE KEY
- Lights: - OFF
- Master switches: - OFF (BOTH)
- Control lock: - INSERT
- Chocks: - INSERT