Cessna 152 Checklist Preflight



CABIN

- 1. Check Discrepancies and Inspections
- 2. Required Papers in Airplane (AROW)
- 2. Enter HOBBS Reading on TACH Sheet
- 3. Control Wheel Lock REMOVE
- 4. Ignition Switch OFF
- 5. Master Switch ON
- 6. Fuel Gauges QUANTITY
- 8. Master Switch OFF
- 9. Fuel Shutoff Valve ON

2) FUSELAGE AND EMPENNAGE

- 1. Fuel Drain DRAIN
- $2.\ Fuselage/Empennage\ \dots.\ CHECK\ CONDITION$
- 3. Rudder Gust Lock REMOVE
- 4. Tail Tie-down DISCONNECT
- 5. Control Surfaces CHECK Attachment and Movement
- 6. Empennage/Fuselage. . . . CHECK CONDITION

3) RIGHT WING TRAILING EDGE

4) RIGHT WING

- 1. Wing Tie Down DISCONNECT
- 2. Undercarriage/Tire CHECK Condition, Inflation, and Brakes
- 3. Fuel Drain DRAIN
- 4. Fuel Quantity DIP/MEASURE
- 5. Fuel Filler Cap SECURE (Check Vent)
- 6. Wing Surface CHECK CONDITION
- 7. Windshield......CLEAN

5) NOSE

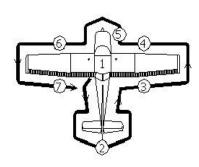
- 1. Engine Oil Level 4-6 QUARTS
- 2. Fuel Sump DRAIN
- 3. Prop/Spinner CONDITION
- 4. Alternator Belt TIGHT
- 5. Oil Cooler UNOBSTRUCTED
- 6. Landing Light......CLEAN
- 7. Air Filter UNOBSTRUCTED
- 8. Wheel Strut/Tire CHECK Condition and Inflation
- 9. Static Port UNRESTRICTED

6) LEFT WING

- 1. Fuel Quantity DIP/MEASURE
- 2. Fuel Filler Cap SECURE (Check Vent)
- 3. Pitot Tube UNRESTRICTED/CLÉAR
- 4. Fuel Tank Vent CLEAR
- 5. Wing Tie Down DISCONNECT
- 6. Stall Warning OPERATION
- 7. Wing Surface CHECK CONDITION

7) LEFT WING TRAILING EDGE

- 3. Undercarriage/Tire CHECK Condition, Inflation, and Brakes
- 4. Remove Chalks.....SECURE TOW BAR



NIGHT	PREFLIGHT

- Master Switch ON
 Beacon/Strobes TEST
- 3. NAV Lights TEST
- 4. Landing Light TEST
- 5. Interior Lights TEST
- . Master Switch OFF

Normal Operating Procedures



BEFORE STARTING ENGINE 1. Preflight Inspection COMPLETE 2. Passenger Briefing COMPLETE 3. Seats, Seatbelts ADJUSTED/FASTENED 4. Brakes TEST and SET 5. Avionics OFF 6. Circuit Breakers CHECK IN 7. Fuel Shutoff Valve ON STARTING ENGINE 1. Mixture RICH 2. Carburetor Heat COLD 3. Master Switch ON 4. Beacon/Strobes ON 5. Key.....IN IGNITION 6. Throttle OPEN 1/4 - 1/8 Inch 9. Propeller Area CLEAR 10. Ignition Switch START (Release When Engine Starts) 11. Throttle IDLE (1000 RPM or Below) 12. Oil Pressure RISING 13. Ammeter STARTER DISENGAGED (Charging) 14. Flaps UP 15. Radios/Avionics ON and Frequency Set 16. Transponder STANDBY (Set 1200 or Assigned Squawk) 17. Taxi to Run-Up Area 18. Brakes TEST RUNUP BEFORE TAKEOFF 1. Cabin Doors CLOSED and LATCHED 2. Flight Controls FREE and CORRECT 3. Elevator Trim TAKEOFF 4. Flight Instruments CHECK and SET 5. Brakes ON/SET 6. Throttle 1700 RPM A. Magnetos CHECK RIGHT, then LEFT B. Carburetor Heat TEST C. Ammeter CHARGING D. Engine Instruments TEMP & PRESSURE E. Suction Gauge CHECK ROUGH MAG PROCEDURE 7. Throttle IDLE Throttle 2000 RPM 8. Throttle Friction Lock ADJUST 2. Mixture LEAN PK RPM 9. Lights AS REQUIRED 3. Time 30 SECONDS 10. Radios/Avionics SET 4. Mixture RICH 11. Transponder ALTITUDE 5. Throttle 1700 RPM 12. Mixture......RICH Continue RUNUP

Cessna 152 Checklist **Normal Operating Procedures**



AIRSPEEDS (KIAS)

V_Y......67 @ S.L.

V_X.....54 @ S.L.

V_{NE}.....149

V_{NO}.....111 V_A.....93-104

V_{FE}85

 V_{S1}40

 V_{S0}35

NORMAL TAKEOFF

1. Wing Flaps 0°-10° 2. Carburetor Heat COLD 3. Throttle FULL/OPEN 4. Elevator Control ROTATE @ 50 KIAS 5. Climb Speed 65-75 KIAS

SHORT FIELD TAKEOFF

1. Wing Flaps 10° 2. Carburetor Heat Cold 3. Brakes APPLY 4. Mixture RICH 5. Throttle FULL/OPEN 6. Brakes RELEASE

7. Elevator Control ROTATE @ 50 KIAS

8. Climb Speed 54 KIAS (Until Obstacles Cleared)

9. Wing Flaps RETRACT @ 60+ KIAS

CRUISE

1. Pitch. LEVEL FLIGHT 2. Power. SET TO CRUISE 3. Trim. SET 4. Mixture. LEANED

Pressure Alti- tude	RPM	20° C Below Standard	Standard Temperature	20° C Above Standard
2,000 ft	2200	65% BHP 91 KTAS 5.4 GPH	62% BHP 90 KTAS 5.1 GPH	58% BHP 89 KTAS 4.9 GPH
4,000 ft	2200	62% BHP 90 KTAS 5.1 GPH	59% BHP 89 KTAS 4.9 GPH	55% BHP 88 KTAS 4.7 GPH
6,000 ft	2200	59% BHP 89 KTAS 5.0 GPH	56% BHP 88 KTAS 4.7 GPH	53% BHP 87 KTAS 4.6 GPH
8,000 ft	2300	64% BHP 94 KTAS 5.3 GPH	60% BHP 93 KTAS 5.0 GPH	56% BHP 92 KTAS 4.8 GPH
10,000 ft	2300	60% BHP 93 KTAS 5.1 GPH	57% BHP 92 KTAS 4.8 GPH	54% BHP 90 KTAS 4.6 GPH
12,000 ft	2300	57% BHP 92 KTAS 4.9 GPH	54% BHP 90 KTAS 4.6 GPH	51% BHP 87 KTAS 4.5 GPH

Note: Refer to POH for further details or precise numbers. Speeds shown are for a 1984 Cessna 152 with fairings removed.

Normal Operating Procedures



DESCENT

1. Power	AS REQUIRED
2. Mixture	AS REQUIRED
3 Carburetor heat	AS REQUIRED

APPROACH

1. Gas	SELECTOR ON
2. Undercarriage	GOOD TIRE INFLATION
3. Mixture	ENRICHEN AS APPROPRIATE
4. Prop	FIXED
5. Flaps	AS REQUIRED
7. Seatbelts	FASTENED
8. Switches	LIGHTS AS REQUIRED

NORMAL LANDING

1. Airspeed	60-70 KIAS (F	laps Up) or 55-65 KIAS	(Flaps 30°)
2. Wing Flaps	AS DESIRED	(Below 85 KIAS)	

SHORT FIELD LANDING

1. Airspeed	60-70 KIAS (Flaps Up)
2. Wing Flaps	30° (Below 85 KIAS)
3. Airspeed	MAINTAIN 55 KIAS FINAL APPROACH
4. Power	IDLE (After Obstacle Clearance)
7 TP 1 1	MADICEAD FIDET

5. Touchdown.....MAIN GEAR FIRST 6. Brake.....APPLY HEAVILY

7. Wing Flaps.....RETRACT

AFTER LANDING	
1. Carburetor Heat	COLD
2. Wing Flaps	UP
3. Transponder	STANDBY

SECURING AIRCRAFT

MINCIAIT	
1. Radios, Electrical	OFF
2. Transponder	1200/OFF
3. Magnetos	.CHECK GROUND
4. Throttle	1200 RPM
5. Mixture	IDLE/CUT-OFF
6. Ignition Switch	OFF
7. Master Switch	OFF
8. Control Lock	. ON
9. Fuel	CHECK QUANTIT

10. Secure TIE DOWN and LOCK



EMERGENCY PROCEDURES

ENGINE FAILURE	
DURING TAKEOFF RUN	
1. Throttle IDLE	
2. Brakes APPLY	
3. Flaps RETRACT	
4. Mixture IDLE/CUT-OFF	
5. Ignition Switch OFF	
6. Master Switch OFF	
IMMEDIATELY AFTER TAKEOFF	
1. Airspeed 60 KIAS	
2. Mixture IDLE/CUT-OFF	
3. Fuel Shutoff Valve OFF	
4. Ignition Switch OFF	
5. Flaps	
6. Master Switch OFF	
DURING FLIGHT	
1. Airspeed	
2. Carburetor Heat ON	
3. Best FieldSELECTED	
4. Checklist -Fuel Shutoff Valve ON	
-Mixture RICH -Carburetor Heat ON	
-Ignition Switch BOTH (START if Prop is	Stonnad)
-Primer	Stopped)
FORCED LANDING	
WITHOUT ENGINE POWER	
1. Airspeed 65 KIAS (Flaps Up)	
60 KIAS (Flaps Down)	
2. Mixture IDLE/CUT-OFF	
3. Fuel Shutoff Valve OFF	
4. Ignition Switch OFF	
5. Flaps AS REQUIRED	
6. Master Switch OFF	
7. Doors UNLATCH Prior to Touchdown	
8. Touchdown SLIGHTLY TAIL LOW	
9. Brakes APPLY HEAVILY	
WITH ENGINE POWER	
1. Airspeed 60 KIAS	
2. Flaps 30°	
3. Final Airspeed	
4. Master Switch OFF	
5. Doors UNLATCH Prior to Touchdown	
8. Touchdown SLIGHTLY TAIL LOW	
9. Ignition Switch OFF	
10. Brakes APPLY HEAVILY	



EMERGENCY PROCEDURES

DITCHING	
1. Radio	TRANSMIT MAYDAY on 121.5 MHZ, giving
	la action and intentions and COLLAWIZ 7700
2. Heavy objects	SECURE OR JETTISON
3. Approach	High winds, heavy seas INTO THE WIND
**	Light winds, heavy swells PARALLEL TO SWELI
4. Wing flaps	High winds, heavy seas INTO THE WIND Light winds, heavy swells PARALLEL TO SWELI 30° ESTABLISH 300 ET/MIN DESCENT AT 55 KIAS
5. Power	ESTABLISH 300 FT/MIN DESCENT AT 55 KIAS
6. Cabin doors	
	LEVEL ATTITUDE AT 300 FT/MIN DESCENT
	CUSHION at touchdown with folded coat
	EVACUATE through cabin doors. If necessary, ope
,	windows and flood cabin to equalize pressure so
	doors can be opened.
10. Life vests and raft	
FIRE DURING START ON GRO	UND
1. Cranking	CONTINUE, to get a start which would suck the
	flames and accumulated fuel through the carburetor
	and into the engine.
If engine starts:	
2. Power	1700 RPM for a few minutes.
3. Engine	SHUTDOWN and inspect for damage.
If engine fails to start:	•
4. Cranking	CONTINUE in an effort to obtain a start.
5. Fire extinguisher	OBTAIN (have ground worker obtain if not installed
6. Engine	
A. Master switch	OFF
B. Ignition switch	
C. Fuel shutoff valve	
	EXTINQUISH using fire extinguisher, wool blanker
	or dirt.
8. Fire damage	or dirt INSPECT, repair damage or replace damaged comp
	nents or wiring before conducting another flight.
ENGINE FIRE IN FLIGHT	IDLE CUE OFF
1. Mixture	
2. Fuel shutoff valve	
3. Master switch	
	OFF (except wing root vents)
5. Airspeed	85 KIAS (if fire is not extinguished, increase glide
	speed to find an airspeed which will provide an in
	combustible mixture)
6. Forced landing	



EMERGENCY PROCEDURES

FIRES (CONT)

ELECTRICAL FIRE IN FLIGHT

- 1. Master Switch OFF
- 2. All other switches OFF (except ignition switch)
- 3. Vents/Cabin Air/Heat CLOSED
- 4. Fire Extinguisher ACTIVATE (if available)
- 5. Aircraft Cabin VENTILATE

If fire appears out and electrical power is necessary for continuance of flight:

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

CABIN FIRE

- 1. Master Switch OFF
- 2. Vents/Cabin Air/Heat CLOSED (to avoid drafts).
- 3. Fire Extinguisher ACTIVATE (if available).
- 4. Aircraft Cabin VENTILATE
- 5. Land the airplane as soon as possible to inspect for damage.

WING FIRE

- 1. Navigation Light Switch . . OFF
- 2. Strobe Light Switch OFF (if installed)
- 3. Pitot Heat Switch OFF (if installed)

NOTE—Perform a side slip to keep the flames away from the fuel tank and cabin, and land as soon as possible, with flaps retracted.

LANDING WITH A FLAT MAIN TIRE

- 1. Wing Flaps. AS DESIRED
- 2. Approach NORMAL
- 3. Touchdown GOOD TIRE FIRST, hold airplane off flat tire as long as possible.

ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTIONS

AMMETER SHOWS EXCESSIVE RATE OF CHARGE (full scale deflection)

- 1. Alternator OFF
- 2. Alternator Circuit Breaker PULL
- 3. Nonessential Electrical Equipment. . .OFF
- 4. Flight TERMINATE as soon as practical.

EMERGENCY PROCEDURES



LOW-VOLTAGE LIGHT ILLUMINATES DURING FLIGHT

(Ammeter Indicates Discharge)

NOTE—Illumination of the low-voltage light may occur during low RPM conditions with an electrical load on the system such as during a low RPM taxi. Under these conditions, the light will go out at higher RPM. The master switch need not be recycled since an over-voltage condition has not occurred to de-activate the alternator system.

3. Master Switch	. ON . CHECK OFF
If low-voltage light illuminates again:	
7. Alternator	. OFF
8. Nonessential Radio and Electrical E	quipment OFF
9. Flight	. TERMINATE as soon as practical.

ICING ENCOUNTER

1. Turn pitot heat switch ON (if installed).

1. Radios OFF
2. Alternator Circuit Breaker . . . CHECK IN

- 2. Turn back or change altitude to obtain an outside air temperature that is less conducive to icing.
- 3. Pull cabin heat control full out to obtain maximum defroster air temperature. For greater air flow at reduced temperatures, adjust the cabin air control as required.
- 4. Open the throttle to increase engine speed and minimize ice buildup on propeller blades.
- 5. Watch for signs of carburetor air filter ice and apply carburetor heat as required. An unexpected loss in engine speed could be caused by carburetor ice or air intake filter ice. Lean the mixture for maximum RPM if carburetor heat is used continuously.
- 6. Plan a landing at the nearest airport. With an extremely rapid ice build-up, select a suitable "off airport" landing site.
- 7. With an ice accumulation of 1/4 inch or more on the wing leading edges, be prepared for significantly higher stall speed.
- 8. Leave wing flaps retracted. With a severe ice build-up on the horizontal tail, the change in wing wake airflow direction caused by wing flap extension could result in a loss of elevator effectiveness.
- 9. Open left window and, if practical, scrape ice from a portion of the windshield for visibility in the landing approach.
- Perform a landing approach using a forward slip, if necessary, for improved visibility.
- 11. Approach at 65 to 75 KIAS depending upon the amount of ice accumulation.
- 12. Perform a landing in level attitude.