



Cessna 152 Pilot Checklist (16-01)

Airspeeds for Safe Operation¹

V _r (Rotation Speed)	50 knots IAS
V _{so} (Stall Speed Landing Configuration)	35 knots IAS
V _{sl} (Stall Speed Clean Configuration)	40 knots IAS
V _x (Best Angle Climb)	54 knots IAS
V _y (Best Rate Climb)	67 knots IAS
V _{fe} (Flap Extension Speed)	85 knots IAS
V _a (Manoeuvring)	104 knots IAS
Maximum Distance Glide	60 knots IAS
Initial Approach Speed 20° Flaps	65 knots IAS
Final Approach Speed 30° Flaps	54 knots IAS
Final Approach Speed 20° Flaps	58 knots IAS
Final Approach Speed 10° Flaps	62 knots IAS
Final Approach Speed 0° Flaps	65 knots IAS

Initial Cockpit Checks 1

Control Column	Unlocked
Fire Extinguisher	Secured and Checked
First-aid Kit	Checked
Survival Kit	Checked
Pilot Operating Handbook	Checked
Aircraft Documents	Checked
Journey Log (on board if required)	Checked
Unoccupied Seats	Belts Secured
Flight Supplement	Checked
Navigation Charts	Checked
Life Jackets (if required)	Checked
Radio	Off
VOR, and GPS	Off
Transponder	Off
Electric Switches	Off
Intercom	Off
Circuit Breakers & Fuses	Checked
Fuel Shutoff Valve	On
Master BATT Switch	On
Fuel Gauges	Checked
Taxi Light	On
Landing Light	On
Beacon Light	On
Navigation Lights	On
External Lights	Checked

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¹ Speeds are listed here as “indicated” airspeeds. They are based upon Pilot Operating Handbook recommended approach speeds of “60 to 70 knots with flaps up, or 55 to 65 knots with flaps down” Speeds are based upon maximum gross weight.

Initial Cockpit Checks continued

Taxi Light	Off
Landing Light	Off
Beacon Light	Off
Navigation Lights	Off
Flaps	Extend To 40°
Master BATT Switch	Off

Conduct External Pre-flight Inspection

Note: Add oil at the 5 US quarts level.

Passenger Briefing 2

ELT	Location and Function
Door / Emergency Exit	Operation
Fire Extinguisher	Location & Operation
Seat & Seat Belts	Operation
Baggage	Stowage
First Aid Kit	Location
Survival Kit	Location
Smoking	No Smoking
Emergency	Review Procedure

(Bags - stowed, seat backs- upright, seat belts - tight, sharp objects – remove from pockets, eye glasses - remove, dentures – remove, brief passenger re. opening door prior to landing).

Pre-Start 3

Flaps	Retracted
Brakes	Apply and maintain toe brakes
Area	Clear
Fuel Shutoff Valve	On
Carburetor Heat	Cold
Hobbs and Time	Record
Master BATT Switch	On
Beacon Light	On

Engine Start 4

Note: The carburetor used on this airplane does not have an accelerator pump; therefore, pumping of the throttle must be avoided during starting because doing so will only cause excessive leaning (POH, 4-11)."

Cold Engine 4a

Mixture	Set Rich
Primer	Inject 3 Times
Throttle	Open ½ Inch
Propeller	“Clear”
Starter	Engage
Oil Pressure	Checked
Throttle	1000 RPM
Oil Pressure	Checked
Master ALT Switch	On

Warm or Hot Engine 4b

Mixture	Set Rich
Throttle	Open ½ Inch
Propeller	“Clear”
Starter	Engage
Oil Pressure	Checked
Throttle	1000 RPM
Oil Pressure	Checked
Master ALT Switch	On

Flooded Engine Start 4c

“Weak intermittent firing followed by puffs of black smoke form the exhaust stack indicates overpriming or flooding (POH P. 4-11).”

Caution: A flooded engine start should not be attempted until all fuel at the bottom of the engine cowling has evaporated.

Mixture	Idle Cut-off
Throttle	Full Open
Propeller	“Clear”
Starter	Engage
When engine starts:	
Throttle	Closed
Mixture	Set Rich
Oil Pressure	Checked
Throttle	set 1000 RPM
Master ALT Switch	On

Taxi 5

Intercom	On
Transponder	Set Standby and Squawk 1200
Radios	On
ATIS (if available)	Checked
Altimeter	Set To ATIS/Elevation
Communications (as applicable)	Position/Intention
Altimeter (if applicable)	Re-set
Transponder (if applicable)	Set Discrete Code
Brakes	Check
Flight Instrument	Ground Roll Check
Controls	As Per Wind Conditions

Warning: The **survival equipment** on board this aircraft contains minimal content for operational training in the temperate west-coast climatic area. When flying outside this area, Langley Flying School requires that it is the pilot’s responsibility to ensure survival equipment appropriate to the climatic conditions as per *CAR 602.61*.

Warning: With the exception of emergencies, Langley Flying School prohibits the landing of this aircraft at any aerodrome not certified by Transport Canada or the US FAA.

Run-up 6

Throttle	Set 1000 RPM
Area	Clear
Brakes	Apply and maintain toe brakes
Alternator	Load Check (Electrical Switches “ON”, check Load increase, Electrical Switches “OFF”, check Load decrease)
Throttle	Set 1700 RPM
Gyro Vacuum	Check (4.6 – 5.4 “Hg)
Ignition Switch	Check (125 RPM max. drop & 50 RPM max. difference)
Oil Temperature	Check
Oil Pressure	Check
Carburettor Heat	Check
Mixture	Check
Throttle	Closed
Carburettor Heat	On
Oil Pressure	Idle Check
Carburettor Heat	Off
Throttle	Set 1000 RPM

Pre-takeoff 7

Seats	Secure
Harnesses	Secure
Hatches & Windows	Closed and Locked
Heading Indicator	Set
Flight Instruments	Check and Set
Ignition Switch	Both
Fuel	Sufficient
Engine Gauges	Check
Primer	In and Locked
Mixture	Set
Carburettor Heat	Off
Flaps	Free, Symmetrical, and Set
Trim	Check and Set
Control Column	Free and Correct

Takeoff Briefing

Runway Length	Verify Sufficient
Crosswind Condition	Check Windsock
Rotation and Climb Speeds	Review
Departure Procedures	Review

Engine Failure Vital Actions

Below 800’	
Airspeed	60 knots
Control	Gentle turns avoid fixed objects
Carburettor Heat	On
Primer	In & Locked
Fuel Shutoff Valve	On
Mixture	Rich
Ignition Switch	On

Above 800’

Same vital actions—more aggressive in selecting field.

Holding Short 8

Time	Record
Traffic and Runway	Checked and Clear
Communications	Clearance and/or Intentions ²

Runway 9

Traffic	Clear
Landing Light	On
Navigation Lights (as required)	On
Transponder	Set ALT
Heading Indicator	Confirm Runway Heading
Aileron Inputs	For Crosswind as required
Maximum Power	Confirmed

Post Takeoff (500' AGL) 10

Oil Pressure	Green
Oil Temperature	Green
Flaps	Retract

Level/Cruise 11

Throttle	Set
Mixture	Set (do not lean at or below 4000')
Carburettor Heat	Check
Heading Indicator	Confirmed/Set

Pre-descent 12

Altimeter	Set
Mixture	Set Full Rich
Carburettor Heat	On before power < 1900 rpm

Pre-landing 13

Ignition Switch	Both
Oil Temperature	Green
Oil Pressure	Green
Primer	In & Locked
Mixture	Rich
Master	On
Carburettor Heat	On
Fuel Shutoff Valve	On
Carburettor Heat	Off
Brakes	Checked
Seats	Upright
Seat Belts	Secured
Baggage	Stowed

Post-landing 14

Carburettor Heat	Off
Landing Light	Off
Transponder	Off
Time	Record

Engine Shut-down 15

Throttle	Set 1000 RPM
Radio	Select 121.5 & Check ELT
Radios	Off
Navigation (VOR, ADF, GPS, Loran C)	Off
Navigation Lights	Off
Panel Lights	Off
Taxi Light	Off
Beacon Light	Off
Intercom	Off
Throttle	Close
Ignition Switch	Check Dead Mags
Mixture	Idle cut-off
Ignition Switch	Off
Key	Dash
Master	Off
Hobbs and Time	Record
Control Column	Secure as required
Aircraft	Secure as required
ATC Flight Plan	Closed if applicable

² Note: All clearance from a Control Tower authorising movement on to a runway or takeoff from a runway must be read-back to the controller.

EMERGENCY PROCEDURES

Engine Failure During Takeoff Run

Throttle	Close
Brakes	Apply
Wing Flaps	Retract
Mixture	Idle Cut-off
Ignition Switch	Off
Master Switch	Off

Engine Failure Immediately After Takeoff

Airspeed	60 knots
Mixture	Idle Cut-off
Fuel Shutoff Valve	Off
Ignition Switch	Off
Wing Flaps	As Required
Master Switch	Off

Engine Failure During Departure

Airspeed	65 MPH
Below 800' AGL:	
Control	Gentle Turns
Carburettor Heat	On
Fuel Selector	On
Communication	May Day
Above 800' AGL	
Same vital actions as above, but more aggressive in selecting field.	
When committed to landing:	
Magnetos	Off
Fuel Selector	Off
Mixture	Idle Cut-off
Seat Belts/Harnesses	Tight
Master Switch	Off when landing flaps set

EMERGENCY PROCEDURES

Engine Failure During Flight

Airspeed	60 knots
Carburettor Heat	On
Primer	In & Locked
Fuel Shutoff Valve	On
Mixture	Rich
Ignition Switch	Both
(or START if propeller is stopped)	

Emergency Landing Without Engine Power

Airspeed	65 knots (flaps UP) 60 knots (flaps DOWN)
Mixture	Idle Cut-off
Fuel Shutoff Valve	Off
Ignition Switch	Off
Wing Flaps	As Required (30° Recommended)
Ignition Switch	Off
Master Switch	Off
Doors	Unlatch Prior To Touchdown
Touchdown	Slightly Tail Low
Brakes	Apply Heavily

EMERGENCY PROCEDURES

Precautionary Landing With Engine Power

Airspeed	60 knots
Wing Flaps	20°
Selected Field	Fly over, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed
Radio and Electrical Switches	Off
Wing Flaps	30°
Airspeed	55 knots
Master Switch	Off
Doors	Unlatch Prior To Touchdown
Touchdown	Slightly Tail Low
Ignition Switch	Off
Brakes	Apply Heavily

Engine Fire During Start On Ground

Cranking	CONTINUE
	Continue, to get a start which would suck the flames and accumulated fuel through the carburettor and into the engine
If Engine Starts:	
Power Engine	1700 rpm for a few minutes Shutdown and inspect for damage.
If Engine Fails to Start:	
Cranking	Continue in an effort to obtain a start
Engine Secure	
Mixture Idle Cut-off	
Fuel Shutoff Valve	Off
Master Switch	Off
Ignition switch	Off
Fire Extinguisher	Obtain

EMERGENCY PROCEDURES

Engine Fire in Flight

Mixture	Idle cut-off
Fuel Shutoff Valve	Off
Cabin Heat And Air	Off
	(except wing root vents)
Airspeed	85 knots
	(If fire is not extinguished, increase glide speed to find an airspeed which will provide an incombustible mixture)
Forced Landing	Execute
	(as described in EMERGENCY LANDING WITHOUT ENGINE POWER)

Electrical Fire in Flight

Master Switch	Off
All Other Switches (except ignition)	Off
Vents/Cabin Air/Heat	Closed
Fire Extinguisher	Activate (if available)

Warning: ventilate cabin after discharging extinguisher in closed cabin.

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

Master Switch	On
Circuit Breakers	Check for faulty circuit —do no reset
Radio/Electrical Switches	On one at a time, with delay after each until short circuit is localized.
Vents/Cabin Air/Heat	Open when fire is completely extinguished.

EMERGENCY PROCEDURES

Cabin Fire

Master Switch	Off
Vents/Cabin Air/Heat	Closed
Fire Extinguisher	Activate (if available)

Warning: ventilate cabin after discharging extinguisher in closed cabin.

Land the aircraft as soon as possible to inspect for damage.

Wing Fire

Navigation Light Switch	Off
Strobe Light Switch (if installed)	Off
Pitot Heat Switch (if installed)	Off

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.

Engine Roughness

Carburettor Heat	On
	Wait for decrease in engine roughness or increase in RPM.

If engine roughness remains:

Mixture	Adjust for maximum smoothness
Engine Gauges	Check
Magneto Switch	Select Left and Right
Primer	In & Locked

If roughness persists, prepare for a precautionary landing at pilot's discretion.

EMERGENCY PROCEDURES

Loss of Oil Pressure

Normal Oil Temperature:

"If low oil pressure is accompanied by **normal oil temperature**, there is a possibility the oil pressure gage is malfunctioning. A leak in the line to the gage is not necessarily cause for an immediate precautionary landing because an orifice in this line will prevent a sudden loss of oil from the engine sump. However, a **landing at the nearest airport would be advisable** to inspect the source of trouble.

Rising Oil Temperature:

If a **total loss of oil pressure is accompanied by a rise in oil temperature**, there is a good reason to suspect an engine failure is imminent. **Reduce engine power immediately and select a suitable forced landing field.** Use only the minimum power required to reach the desired touchdown spot. (POH, P. 3-14)."

Open Door

If door opens during takeoff, fly aircraft normal and return for landing.

Landing with a Flat Main Tire

Wing Flaps	As desired
Approach	Normal
Touchdown—good tire first, hold airplane off flat tire as long as possible with aileron control.	

Over-Voltage Light Illuminates

Master Switch	Off (both sides)
Master Switch	On
Over-Voltage Light	Off

If light illuminates again, terminate flight as soon as practical.

Ammeter Shows Discharge

Alternator	Off (left side)
Nonessential Electrical Equipment	Off

Terminate flight as soon as practical.

Spins

Ailerons	Neutral Position
Throttle	Idle Position
Rudder	Apply and Hold Opposite to Direction of Rotation
Control Wheel	Briskly Forward to Break Stall
Rudder	Neutralize as rotation stops
Control Wheel	Make Smooth Recovery from Dive

Ditching

Radio	Transmit Mayday on 121.5 MHz, giving location and intentions
Heavy Objects (in baggage area)	Secure or jettison
Approach	High Winds, Heavy Seas – Into the wind Light Winds, Heavy Swells – Parallel to swells
Wing Flaps	30°
Power	Establish 300 ft/min descent at 55 knots
Cabin Doors	Unlatch
Touchdown	Level attitude at 300 ft/min descent
Face	Cushion at touchdown with folded coat
Airplane	Evacuate through cabin doors. If necessary, open windows and flood cabin to equalize pressure so doors can be opened
Life Vests And Raft	Inflate

Operational Telephone Numbers:

Langley Flying School	(887) 532-6461
LFS outside office hours	(778)-878-7747
Kamloops FIC	(866) 992-7433
Canadian FSS Toll Free	(800) 463-6377
US FSS Toll Free	(800) WX-BRIEF
Canadian Customs ³	(888) CAN-PASS
CYNJ TWR (emergency Only)	604-534-9443
CYXX TWR (emergency Only)	604-855-1199
CYYJ TWR (emergency Only)	604-946-0911
VIC TML (emergency Only)	604-586-4500

Operational Requirements

Add oil at the 5 US quarts level.

Keep cabin doors secured at all times.

Langley Flying School's *Aircraft Status Display* must be reviewed prior to flight

Relay all emergencies through Flight Service (1-800-INFO-FSS).

As per Transport Canada requirements, maintenance on this aircraft (other than the adding of fuel, oil, or air) is prohibited without the consent of the *Maintenance Manager* for Langley Flying School.

The pilot is responsible to ensure that the aircraft is properly equipped with survival equipment as per the *Canadian Aviation Regulation 602.61*.

³ Note: Canada Customs must be advised prior to departure for a return flight to Canada, including the estimated ETA, the airport of entry, the citizenship, name, and birthdate of all passengers on board the aircraft, and any declarations related to purchases made in the US. Also note the limited times at which CYXX is a valid airport of entry.

Useful Local Radio Frequencies:

Caution: Check Current Charts as data may be incomplete or outdated.

Abbotsford		CYXX
ATIS	119.8	
Gnd	121.8	
Twr (inner)	119.4	
Twr (outer)	121.0	
MF	119.4	
Boundary Bay		CZBB
ATIS	125.5	
Gnd	124.3	
Twr (inner)	118.1	
Twr (outer)	127.6	
MF	118.1	
Chilliwack		CYCW
ATF	122.7	
Delta Heritage Air Park		CAK3
ATF	122.8	
Fort Langley		CBQ2
ATF	123.2	
Langley		CYNJ
ATIS	124.5	
Gnd	121.9	
Twr	119.0	
MF	119.0	
Hope		CYHE
ATF	123.3	
Nanaimo		CYCD
Radio	122.1	
MF/ATF	122.1	
Pitt Meadows		CYPK
ATIS	125.0	
Gnd	123.8	
Twr	126.3	
MF	126.3	
Powell River		CYPW
MF	123.0	
Sechelt-Gibsons		CAP3
ATF	123.5	
Surrey / King George Airpark		CSK8
ATF	123.5	
Vancouver Harbour		CBC7
ATIS	126.8	
Twr	118.4	
ATF	118.4	
Vancouver Intl		CYVR
ATIS	124.6	
Cinc Del	121.4	
Gnd (South)	121.7	
Gnd (North)	127.15	
Twr (South)	118.7	
Twr (North)	119.55	
Twr (VFR)	124.0	
Victoria Intl		CYYJ
ATIS	118.8	
Cinc Del	126.4	
Gnd	121.9	
Twr (Inner)	119.7	
Twr (Outer)	119.1	