



# CHECKLIST

**Cessna 172N**

**VH-DOL**



## CESSNA 172N VH-DOL AIRCRAFT SPECIFICATIONS

### Take off & Landing Speeds

Rotate Speed (Vr)	60 – 70kts	Normal Approach (Flaps Up)	75kts
Take Off Safety Speed	65kts	Normal Approach (Flaps 40°)	70kts
Best Angle (Vx)	59kts	Short Field Approach (Flaps 40°)	60kts
Best Rate (Vy)	73kts	Balked Approach (Max Power & Flap 20°)	55kts

### General Speeds

Never Exceed (Vne)	158kts	Max Window Open	158kts
Max Normal Operating (Vno)	127kts	Level Stall Speed (Vs) – flap up	44kts
Max Maneuvering (Va)	97kts	Level Stall Speed (Vso) – flap down	33kts
Max Flap Extension		Max Crosswind	15kts
Flaps 10°	110kts	TAS	110kts
Flaps beyond 10°	85kts	Best Glide Speed	70kts

### Fuel & Oil

Fuel Type	100LL or 100/130 Avgas	Engine Type and Horsepower	Lycoming O320 160BHP @ 2700RPM
Maximum Fuel	204 litres	Oil Grade	Aero W100 or W100 Plus
Max Useable Fuel	189 litres	Maximum Oil	6 Quarts
Fuel Consumption	35 Litres/Hour	Minimum Oil	4 Quarts

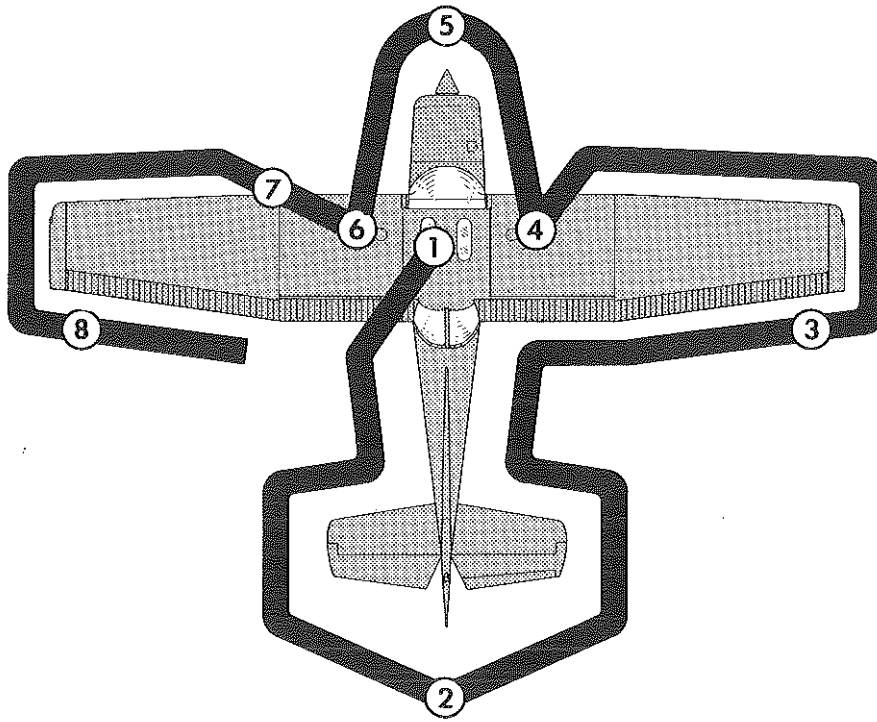
**\*\*Note: 100LL Avgas is BLUE in colour and 100/130Avgas is GREEN\*\***

### Performance

Basic Empty Weight	711Kg	Maximum Power	2750 RPM
Max Take off Weight	1050kg	Static Power	2280 – 2400 RPM
Max Landing Weight	1050kg	Normal Cruise	2450 RPM
		Climb Power	Full Power

**\*\* Note: With Full tanks VH-DOL can easily be overloaded! \*\***

# PREFLIGHT



## NOTE

Visually check airplane for general condition during walk-around inspection. In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also, make sure that control surfaces contain no internal accumulations of ice or debris. Prior to flight, check that pitot heater (if installed) is warm to touch within 30 seconds with battery and pitot heat switches on. If a night flight is planned, check operation of all lights, and make sure a flashlight is available.

## 1) COCKPIT

Pilot's Operating Handbook	Available in the aeroplane
Control Locks	Remove
Ignition	Off, Key Removed
Avionics Switch	Off
Master Switch	On
Flaps	Extend
Lights and Strobes	On and Check
Master Switch	Off
Alternate Static Source	Off
Fuel	Check Quantity, Dip and Drain
Flight Record Sheet	Record Fuel and VDO

## EXTERIOR

### 2) *Empennage*

#### ***Left Fuselage***

Skin Check surface condition

#### ***Tail***

Left Stabilizer Check Condition and security

Left Elevator Check Condition

Full Free movement

Check linkages

Right Elevator Check Condition

Full Free movement

Check linkages

Trim Tab Check condition and linkages

Right Stabilizer Check condition and security

Tail Tie Down Remove

#### ***Right Fuselage***

Skin Check surface condition

### 3) *Right Wing*

Flap Check surface condition

Check linkages and runners

Aileron Check surface condition

Linkages and hinges secure

Balance weights secure

Full free movement

Wing Tip Check condition and Security

Wing Tie Down Remove

Lower Wing Surface Check condition

Wing Leading Edge Check for Dents along entire length

#### **4) Landing Gear**

Tyre	Check tread and general condition Check correct inflation
Hydraulic Line	Check for leaks
Disc Brake	Check condition
Strut and Fairing	Check condition

#### **5) Front Fuselage and Engine**

Windscreen	Condition and cleanliness
Cowling	condition and security
Oil Quantity	Check
Propeller	Look for chips and cracks (esp. leading edge)
Spinner	condition and security
	Intakes clear
	Landing Light unbroken
Nose Strut	Check oleo extension Check linkage, nuts and split pins secure No leakage from shimmy damper or oleo
Nose Wheel	Check tread and general condition Check correct inflation
Stand Back and Check	Fuel Caps ON Tie downs OFF Start Up Area CLEAR, NO LOOSE STONES Prop Wash Area CLEAR General condition of aircraft GOOD
Static Vent	Clear

#### **6) Landing Gear**

Tyre	Check tread and general condition Check correct inflation
Hydraulic Line	Check for leaks
Disc Brake	Check condition
Strut and Fairing	Check condition

#### **7) Left Wing**

Wing Leading Edge	Check for Dents along entire length Check Pitot tube Clear Check Stall Warning horn Check fuel Vent Clear
Wing Tip	Check condition and Security
Wing Tie Down	Remove
Lower Wing Surface	Check condition
Aileron	Check surface condition Linkages and hinges secure Balance weights secure Full free movement
Flap	Check surface condition Check linkages and runners
Wing Strut	Check condition and security

## Pre Start

Pre Flight Inspection	Complete
Position	Clear
Maintenance Release	Check
Flight Manual	On-board
Pax Brief	<ul style="list-style-type: none"><li>• Entry and exit points/emergency exits</li><li>• Seat adjustment</li><li>• Seatbelt usage</li><li>• Stowage of loose items</li><li>• Ventilation outlets and controls</li><li>• Remain clear of flight controls</li><li>• Emergency Equipment and how to use</li><li>• No Smoking policy</li><li>• Flight details</li></ul>
Security	Check
Seats	Adjusted and Secured
Hatches & Harness	Secure
Fuel	Both and sufficient
Circuit breakers	set
Mixture	Rich
Throttle	Open 10mm
Friction Nut	Set
Carby Heat	Cold/off
Switches and Avionics	Off
Trims	Set
Rotating Beacon	On
Battery	On
Flaps	Up
Oil Temp	Check
Prime	As Req'd
Nav Lights	As Req'd
Brakes	Test and Set
Clear Prop	Start

## AFTER START

### ROVER

<b>R</b> evs	Set 1000
<b>O</b> il Pressure	Green within 30 seconds
<b>V</b> acuum	Check
<b>E</b> lectrics	Alternator On – Charging
<b>R</b> adio	On & Check Frequency and Squelch
	Transponder SBY .... Code set
	Rotating Beacon..... On
	Taxi/Landing Lights ...As Req'd

## TAXI

### **BAG**

<b>B</b> reaks	Test and check
<b>A</b> vionics	Check and set
<b>G</b> yro's	Check

## PRE TAKEOFF – BRAKES ON

<b>T</b> rim	Check and Set
<b>M</b> ixture	Rich
<b>P</b> rimers	In and Locked
<b>F</b> uel	On and sufficient
<b>I</b> nstruments	Attitude Indicator .....Set Altimeter ..... Elevation/QNH set Directional Gyro ..... Set Turn Co coordinator .....No Flags Temps & Pressure ..... GREEN
<b>S</b> witches	Test Idle Set 1700RPM Carby Heat      Test Magnetos <ul style="list-style-type: none"><li>• Max Drop ..... 125RPM</li><li>• Max Difference ..... 50 RPM</li><li>• Smooth Running</li></ul> Engine Instruments <ul style="list-style-type: none"><li>• Vacuum ..... GREEN</li><li>• Temps and Pressures .....GREEN</li><li>• Ammeter .....POSITIVE CHARGE</li></ul> Set 1000RPM Circuit Breakers ..... In
<b>C</b> ontrols	Full Free and correct Flaps ... cycle and set
<b>H</b> atches and Harnesses	Secure
<b>E</b> mergency Brief	Complete
<b>D</b> eparture brief	Complete

## LINING UP

### LIGHTS, CAMERA, ACTION

<b>Land Light &amp; Strobes</b>	ON
<b>Transponder</b>	ON 'ALTITUDE'
<b>DI &amp; Compass</b>	CHECK ALIGNED

## AFTER TAKEOFF/ GO AROUND

### PUFSIT

<b>P</b> ower	Full
<b>U</b> ndercarriage	Fixed
<b>F</b> laps	Retract
<b>S</b> witches	Landing Lights off
<b>I</b> nstruments	Climb performance, Centreline tracking Check
<b>T</b> emps and Pressure	Green

## MANOEUVRES

### HASEL

<b>H</b> eight	Sufficient to safely complete all manoeuvres
<b>A</b> rea	Suitable
<b>S</b> ecurity	Cabin secure/seats/harnesses
<b>E</b> ngine	Power and Mixture Checked Engine T's and P's Green
<b>L</b> ookout	Area Clear



## ENROUTE

### **CLEAROFFS**

<b>C</b> ompass & <b>C</b> ourse	Align and Tracking
<b>L</b> og	ETA's
<b>E</b> ngine	Lean and <b>Green</b>
<b>A</b> ltitude	QNH set and correct
<b>R</b> adios	Frequency set and correct
	Nav aids - Tuned
	Identified
	Tested
<b>O</b> rientation	
<b>F</b> uel	Log and contents
<b>F</b> orced Landing	
<b>S</b> artime	

## PRELANDING/DOWNWIND

### **BUMFISH**

<b>B</b> reaks	Pressure and off
<b>U</b> ndercarriage	Fixed
<b>M</b> ixture	Rich
<b>F</b> uel	On and sufficient
<b>I</b> nstruments	Altitude
	T's and P's <b>Green</b>
<b>S</b> witches	Landing Lights on
<b>H</b> atches and Harness	Secure

## FINAL

### **CPUFF**

<b>C</b> arby Ht	Off
<b>P</b> itch	Full Fine (N/A in C152)
<b>U</b> ndercarriage	Fixed
<b>F</b> lap	as req'd
<b>F</b> uel	Sufficient for Go-Around

## **AFTER LANDING**

FLAPS  
Transponder  
Carby Heat

Identified and Retracted  
SBY  
Off

## **SHUTDOWN**

Throttle  
Avionics  
Mixture  
Switches  
Ignition  
Master Switch

Set 1000RPM  
Radios and Nav aids Off  
Idle Cut off  
Off, except Rotating Beacon  
Off and Keys out  
Off

# **EMERGENCIES**

## **POWER LOSS IN FLIGHT**

### **FM COST**

<b>F</b> uel	On, Primer In and Locked
<b>M</b> ixture	Rich
<b>C</b> arby Heat	On
<b>O</b> il	T's and P's Check
<b>S</b> witches	Mag Check
<b>T</b> hrottle	Cycle and set

## **ENGINE FIRE ON GROUND**

Cranking	Continue
<b>If Engine Starts:</b>	1700RPM for short time, shutdown and inspect for damage

### **If Engine Fails to Start:**

Throttle	Full Open
Mixture	Idle cut off
Cranking	Continue to attempt a start
Fire Extinguisher	Ready
Fuel	Off
Master	Off
Ignition	Off
Fire Extinguisher	Use
Inspect for Damage	

## **ENGINE FIRE IN FLIGHT**

Mixture	Idle cut off
Fuel	Off
Master	Off
Cabin Heat and air	Off, except wing roots
AIRSPEED	<b>100kts</b> – increase glide speed to extinguish fire

**EXECUTE FORCED LANDING**

## ELECTRICAL FIRE

Alternator and Master	Off
Switches All except ignition	Off
Vents/Cabin air/Heat	Off
If fire appears to be out:	
Alternator and Master	On
Circuit Breakers	Check for faulty circuit... do not reset
Radio/Electrical Switches	On one at a time with a delay after each until short circuit is localized
Vents/Cabin Air/Heat	Open once fire is completely extinguished

**IF FIRE IS NOT EXTINGUISHED OPERATE FIRE EXTINGUISHER**

**LAND AS SOON AS POSSIBLE**

**WARNING: CABIN MUST BE VENTILATED AFTER USING FIRE EXTINGUISHER**

## ELECTRICAL POWER LOSS

Alternator & Master	Off
Switches	All Off
Alternator	On
Essential Equipment	On
Land	As soon as possible