



Normal/Abnormal/Emergency Checklists

Revision 06 – 12/26/2022

CESSNA C-172S SKYHAWK

NAV III AVIONICS – KAP140 (“G-1000”)

PREFLIGHT

Pitot Tube Cover Removed

Cabin:

- Documents Check
- Parking Brake Set
- Control Locks Removed
- Magnetos Switch OFF
- Avionics Switch OFF
- Master Switch ON
- Primary Flight Display (PFD) Check On
- Fuel Quantity Check
- Oil Pressure Annunciator Check
- Low Vacuum Annunciator Check
- Low Volts Annunciator Check
- Avionics Switch (BUS 1) ON
- Forward Avionics Fan Check
- Avionics Switch (BUS 1) OFF
- Avionics Switch (BUS 2) ON
- AFT Avionics Fan Check
- Avionics Switch (BUS 2) OFF
- Pitot Heat (IFR) ON
- Aircraft Lights ON

Exit Aircraft and Quickly Complete:

- Stall Warning Opening Check
- Pitot Heat (IFR) Check
- Aircraft Lights Check
- Flaps Extended Full
- Pitot Heat OFF
- Aircraft Lights OFF
- Master Switch OFF
- Pitch Trim Control Takeoff
- Fuel Selector Both
- ALT Static Air Valve OFF
- Fire Extinguisher Check

BEFORE START

- Passenger Briefing Completed
- Seats and Seat Belts Adjust and Lock
- Hobbs Time Check
- Fuel Shutoff Valve ON (Push In)
- Fuel Selector Valve Both
- Brakes Test and Set
- Circuit Breakers Check
- Electrical Equipment OFF
- Avionics Switch OFF

ENGINE START

- Mixture Idle Cut-Off
- Throttle ¼ Inch Open
- STBY BATT Switch (10 Seconds) Test
- STBY BATT Switch Arm
- Engine Indicating Systems Check
- BUS E Volts Check (Minimum 24 Volts)
- M BUS Volts Check (1.5 Volts or Less)
- BATT S Amps Check (Negative)
- STBY BATT Annunciator Check Displayed
- Master Switch ON
- Beacon Light ON

→Cold:

- Prime As Required
- Propeller Area Clear
- Magneto/Starter Engage
- Mixture (When Engine Starts) ... Smoothy Advance
- CAUTION: If engine does not start within 10 seconds, follow Starter Limits, and wait 20 seconds.** Repeat Procedure at “Prime”

→Hot:

- Propeller Area Clear
- Magneto/Starter Engage
- Mixture (When Engine Starts) ... Smoothy Advance
- CAUTION: If engine does not start within 10 seconds, follow Starter Limits, and wait 20 seconds.**

Flooded:

- Mixture Idle Cut-Off
- Throttle ½ Travel Open
- Propeller Area Clear
- Magneto/Starter Engage
- Mixture (When Engine Starts) ... Smoothy Advance
- Throttle Reduce
- CAUTION: If engine does not start within 10 seconds, follow Starter Limits, and wait 20 seconds.** Proceed to Hot or Cold Start procedure

THIS CHECKLIST MUST REMAIN IN AIRPLANE

AFTER START

Tachometer 1000RPM
Oil Pressure..... Check
Amps (M BATT and BATT S)..... Check
Flaps Up
Mixture As Required
NAV Light As Required
Avionics Switch ON
Low Volts Annunciator Not Shown
Transponder ALT and SET

BEFORE TAXI

ATIS/AWOS/ASOS..... Obtain
Altimeter(s) Set (3)
Heading Indicator Match Compass
Radio Check..... Completed
Seat and Seatbelts Secure
Taxi Briefing Completed
Taxi Light..... ON
Parking Brake..... Release
Brakes Check

RUN-UP

Parking Brake Set
Taxi Light..... OFF
Cabin Doors Closed and Locked
Flight Controls Free and Correct
Flight Instruments Check
G-1000 ALT SEL Set
Standby Flight Instruments Check
Autopilot Function Test Check
Elevator Trim Control Takeoff
Fuel Selector Valve Both
Mixture Rich
Throttle 1800RPM
Magnetos Check L & R
VAC Indicator Check
Engine Indicators Check
Ammeter and Voltmeters Check
Annunciators Check
Throttle Check Idle
Throttle 1000RPM
Throttle Control Friction Lock Adjust
Taxi Light..... ON

Empennage:

Baggage Compartment Door..... Locked
Autopilot Static Source Check
Surface Condition Check
Tail Tiedown Disconnect
Control Surfaces Check
Elevator Trim Tab Check
Antennas..... Check

Right Wing:

Flaps Check
Aileron Check
Surface Condition..... Check
Wing Tie Down Disconnect
Main Wheel Tire Check
Brake Pad/Disc Check
Fuel Quantity..... Check
Fuel Filler Cap..... Secure
Fuel Tank Sump Quick Drain Valves Drain

Nose:

Surface Condition Check
Fuel Strainer Valve Drain
Engine Oil Dipstick/ Filler Cap (*Minimum 5*)
..... Check
Engine Cooling Air Inlets Check
Propeller and Spinner Check
Air Filter Check
Nosewheel Strut and Tire Check
Static Source Check

Left Wing:

Fuel Quantity Check
Fuel Filler Cap..... Secure
Fuel Tank Sump Quick Drain Valves Drain
Surface Condition..... Check
Pitot Tube..... Check
Fuel Tank Vent Opening..... Check
Stall Warning Opening..... Check
Wing Tiedown Disconnect
Main Wheel Tire Check
Brake Pad/ Disc Check
Aileron Check
Flaps Check

Final Walk Around:

Chocks Removed
Fuel Caps..... Secure
Engine Air Inlet Covers..... Removed
Pitot Mast Cover..... Removed
Baggage Door Closed and Locked

DO NOT RUSH

ENGINE FIRE DURING START

Magnetos Switch Start

If Engine Starts:

Power 1800RPM

Engine Shutdown

If Engine Fails to Start:

Throttle Full

Mixture Idle Cut-off

Magneto Switch Start

Fuel Shutoff Valve Off (Pull Out)

Fuel Pump OFF

Magnetos Switch OFF

STBY BATT and Master Switch OFF

Engine Secure

Parking Brake Release

Fire Extinguisher Obtain

If Fire continues Abandon Aircraft

ELECTRICAL FIRE (SMOKE IN CABIN)

STBY BATT and Master Switch OFF

Cabin Vents Closed

Cabin HT and Cabin AIR Knobs OFF

Fire Extinguisher Activate

Avionics Switch OFF

All Other Switches OFF

Cabin Ventilate

Emergency Descent Complete as Needed

Land As Soon As Practical

ENGINE FIRE IN FLIGHT

Mixture Idle Cut-Off

Fuel Shutoff Off (Pull Out)

Fuel Pump OFF

Master Switch OFF

Cabin Vents Open

Cabin HT and Cabin AIR Knobs OFF

Airspeed 100 KIAS

Land Proceed to Power Off Landing Procedure

WING FIRE

Landing and Taxi Light OFF

NAV Light OFF

Strobe Light OFF

Pitot Heat OF

FLY THE AIRPLANE

BEFORE TAKEOFF

COM/NAV Frequency Set

Transponder Set

Flaps UP - 10°

Mixture Rich

Cabin 12 Volt Power OFF

Pitot Heat As Required

Cabin Windows Closed

Takeoff Briefing/Time Reviewed

Brakes Release

Landing Light ON

Strobe Light ON

CLIMB

Airspeed 74 KIAS (85 KIAS En-Route)

Mixture As Required

Flaps UP

Engine Gauges Check

CRUISE

Throttle 2100-2700 RPM

Mixture As Required

Engine Gauges Check

Landing and Taxi Light OFF

DESCENT

Throttle As Required

Mixture Adjust

G-1000 ALT SEL Set

ATIS/AWOS/ASOS Obtain

Altimeter(s) Set (3)

Landing and Taxi Light ON

BEFORE LANDING

Seat and Seatbelts Check Secure

Fuel Selector Valve Both

Mixture Rich

Autopilot OFF

Cabin 12 Volt Power OFF

Approach Briefing Complete

AFTER LANDING

Flaps Retracted

Mixture As Required

Elevator Trim Control Takeoff

Strobe Light OFF

Landing Light OFF

Pitot Heat OFF

SHUTDOWN

Parking Brake.....ON
Throttle 1000RPM
Taxi Light..... OFF
ELT..... Silent on 121.500MHz
Transponder ALT and "1200"
Electrical Equipment..... OFF
Avionics Switch OFF
Mixture Idle Cut-Off
Magneto Switch..... Off and Key Removed
Hobbs and Tach TimeRecord
Master Switch..... OFF
STBY BATT Switch OFF
All Switches OFF
Fuel Selector Left or Right
SeatbeltsDisconnect
Final Walk-Around:
Control LockInstall
Cowl PlugsInstall
Pitot Tube Cover.....Install
ChocksInstall
Parking Brake..... Release

REMOVE ALL PERSONAL BELONGINGS

Ensure the aircraft is left in a clean manner for the next pilot. Debris can cause major damage.

DO NOT RUSH

CABIN FIRE

STBY BATT and Master Switch..... OFF
Cabin Vents..... Closed
Cabin HT and Cabin AIR Knobs OFF
Fire Extinguisher Activate

Cabin Vents.....Open
Cabin HT and Cabin AIR Knobs On

SPIN RECOVERY

Throttle Idle
Ailerons Neutral
Rudder Full opposite to Direction of Spin
Control Wheel Briskly forward
Rudder Neutral (When Rotation Stops)
Control Wheel As required for level flight

ENGINE POWER LOSS DURING TAKEOFF

Throttle Idle
Brakes Apply

Flaps Retract
Mixture Idle Cut-Off
Magnetos OFF
STBY BATT and Master Switch OFF
ATC/CTAF..... Notify

ENGINE POWER LOSS DURING FLIGHT

Airspeed 68 KIAS
Suitable Place to Land..... Identify

If Altitude Permits:

Fuel Shutoff ValveON (Push In)
Fuel Selector Valve Both
Fuel Pump Switch ON
Mixture Rich

Magnetos Both
Fuel Pump..... OFF

CAUTION: If the propeller is windmilling, engine will restart automatically within a few seconds. If propeller has stopped (possible at low speeds), turn MAGNETOS switch to START, advance throttle slowly from idle and lean the mixture from full rich as required to obtain smooth operation.

FLY THE AIRPLANE

VACCUM FAILURE

LOW VAC Annunciator Comes ON:

VAC Indicator Check

CAUTION: If vacuum pointer is out of the green band during flight or the gyro flag is shown on the standby attitude indicator, the standby attitude indicator must not be used for attitude information.

HIGH CARBON MONOXIDE LEVEL

CO LVL HIGH Annunciator Comes ON:

Cabin HT and Cabin AIR Knobs OFF
Cabin Vents Open
Cabin Windows Open

CO LVL HIGH Annunciator remains ON:

Land As soon as practical

LOSS OF OIL PRESSURE

Oil Pressure Check
Oil Temperature Check
Throttle As Required
Land As Soon As Practical

STATIC PORT BLOCKAGE

ALT Static AIR Valve ON
Cabin Vents Close
Cabin HT and Cabin AIR Knobs Open
Airspeed Refer to Section 5 (POH)

LANDING ON FLAT MAIN TIRE

Approach Normal
Flaps Full
Touchdown Good Main Tire First
Directional Control Maintain

LANDING ON FLAT NOSE TIRE

Approach Normal
Flaps A Required
Touchdown On Mains
Elevator Full AFT

DO NOT RUSH

POWER OFF LANDING

Pilot and Passenger Seat Back Upright
Seat and Seat Belts Secure
Airspeed 70 KIAS (Flaps UP)
..... 65 KIAS (Flaps 10 - Full)
Mixture Control Idle Cut-Off
Fuel Shutoff Valve Off (Pull Out)
Magnetos OFF
Flaps As Required
Transponder 7700
Passengers Briefed
Doors Unlatch
Touchdown Slightly Tail Low
Brakes Apply Heavily

A/P or PITCH TRIM FAILURE

Control Wheel Grasp Firmly
A/P Trim DISC Button Press and Hold
Elevator Trim Control Adjust Manually
Autopilot Circuit Breaker Pull

INADVERTENT ICING ENCOUNTER

Pitot Heat ON
Cabin HT Knob ON
Defroster Open
Cabin AIR Knob Adjust
Exit Icing Conditions

FLY THE AIRPLANE

HIGH VOLTS ANNUNCIATOR

OR BATT Amps are more than 40 Amps

Master Switch (ALT Only)	OFF
Electrical Load Reduce	Immediately
Avionics Switch (Bus 1)	OFF
Pitot Heat	OFF
Beacon Light	OFF
Landing and Taxi Lights	OFF
NAV Light	OFF
Strobe Light	OFF
CABIN PWR 12V Switch	OFF

CAUTION: The main battery supplies electrical power to the main and essential buses until M BUS VOLTS decreases below 20 volts. When M BUS VOLTS falls below 20 volts, the standby battery system will automatically supply electrical power to the essential bus for at least 30 minutes.

LOW VOLT ANNUNCIATOR

Master Switch (ALT Only)	OFF
ALT FIELD Circuit Breaker	Check In
Master Switch (ALT and BATT)	ON
Low Volts Annunciator Check	OFF
M Bus Volts	Check (27.5 V Minimum)
M BATT Amps	Check Charging (+)

If Low Volts Annunciator Remains On:

Master Switch (ALT Only)	Off
Electrical Load	Reduce Immediately

CAUTION: Low Volts Annunciator may come on during operation below 1000RPM.

AHRS/ADC FAILURE

Red X – PFD Airspeed/ Attitude Indicator (ADC Failure):

ADS/AHRS Circuit Breaker.....	Check In
Standby Instruments.....	Use

Red X – PFD Airspeed/ Attitude Indicator (AHRS Failure):

ADS/AHRS Circuit Breaker.....	Check In
Standby Instruments.....	Use
Magnetic Compass.....	Use

DISPLAY COOLING ADVISORY

PFD1/MFD1 Cooling Annunciator:

Cabin Heat (CABIN HT).....	REDUCE
Forward Avionics Fan.....	Check

Forward Avionics Fan FAIL or PFD1/MFD1 Cooling Annunciator is on for > 3 minutes:

STBY BATT Switch	OFF
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IMPORTANT SPEEDS:

V _G	68 KIAS
V _R	55 KIAS
V _Y	74 KIAS
V _X	62 KIAS
V _S	48 KIAS
V _{SO}	40 KIAS
V _{FE}	110/85 KIAS
V _{NO}	129 KIAS
V _{NE}	163 KIAS
V _A	90-105 KIAS

PASSENGER BRIEFING:

Seatbelts/Harness

- Operation and Adjustment
- Fastened for Taxi, Takeoff, and Landing

Emergency Exits

- Location and Operation

Fire Extinguisher

- Location and Operation

Sterile Cockpit

Flight Controls

- Do not Block or Interfere

Emergency Procedures

TAXI BRIEFING:

Departure Runway

Anticipate Taxi Route

- Taxiways to be use
- Intersecting Runways
- Run-Up area
- Hotspots

TAKEOFF BRIEFING:

Departure Runway

- Length/Distance Available
- Surface Condition
- Wind Direction/Speed

Lift-Off Speed/ Initial Climb Speed

Emergency Procedures

- On-Ground
- In-Air

Normal Departure Procedures

CAUTION: Always ensure that you have the most recent revision of this checklist. Always refer to the pilots operating handbook for specific

THIS CHECKLIST MUST REMAIN IN AIRPLANE