CESSNA R172K COMPANY CHECKLIST

HK-5243-G

NORMAL V - SPEEDS KIAS

VSo (Maximum weight)	46
VS	54
Altitude Loss in a Stall Recovery	160 ft
Vr	55
VX (sea level)	59
VX (10000 ft)	65
VY (sea level)	81
VY (10000 ft)	76
VFE (0º - 40º)	85
VNO	129
VA 2200 lbs Utility	105
VA 2550 lbs	105
VA 2150 lbs	96
VA 1750 lbs	87
VNE	163
Best Glide 2550 lbs (Flaps UP)	75
Max Demon X-Wind	20
Approach Flaps UP	65 – 75
Approach Flaps DOWN	60 – 70
Normal Climb Out	75 – 85
Max Perf Climb At 50Ft	60
Enroute Climb	85 – 95

PREFLIGHT

1. Cabin

Required Documents	*ON BOARD*
Weather	*CHECK*
Weight & Balance	*COMPLETE*
Documents (AROW)	*CHECK*
POH	*AVAILABLE IN THE AIRPLANE*
Inspection/AD status	*CHECK*
Hobbs/Tach	*RECORD*
Control Lock	**REMOVE & STOW**
Ignition Switch	**OFF**
Avionics Power Switch	OFF
Circuit Breakers	CHECK IN
Battery Master	**ON**
Fuel Quantity Indicators	**CHECK**
Fuel Shutoff Valve	**(Push full in) ON**
Fuel Selector Valve	**BOTH**
Alternate Static Source	OFF
Turn Coordinator	*AUDIBLE*
Flaps	*40º*
Elevator & Rudder Trim	***NEUTRAL***
Lights	*CHECK OPERATION*
Master	**OFF**
Fire Extinguisher	*CHARGED AND AVAILABLE*

EXTERIOR INSPECTION

Aft Fuselage

Baggage Door	**CLOSED AND SECURE**
Fuselage	*CHECK*

2. Empennage

Tie-Down	**REMOVE**
Horizontal and Vertical Stabilizers	**CHECK**
Elevator and Trim Tab	CHECK
Rudder	CHECK
Antennas	*CHECK*

3. Right Wing Trailing Edge

Right Flap	CHECK
Right Aileron	**CHECK**
Hinges, actuation arm, pins	CHECK

4. Right Wing Forward

Chocks and Wing Tie Down	**REMOVE**
Main Wheel	**CHECK**
Fuel Drain	**DRAIN AND SAMPLE**
Fuel Quantity	**CHECK**
Fuel Filler Cap	**SECURE**
Leading Edge	CHECK

5. Nose

Static Source	**CHECK**
Prop & Spinner	**CHECK**
Taxi/Landing Light	**CHECK**
Nose Wheel Strut/Tire	**CHECK**
Oil Quantity (6-8 qts)	**CHECK**
Fuel Strainer	**DRAIN AND SAMPLE**
Oil Cap / Door	SECURE
Cowling	ATTACHMENTS SECURE
Cooling Inlets	CHECK
Tow bar	REMOVE AND STOW

6. Left Wing Forward

Main Wheel	**CHECK**
Leading Edge	CHECK
Fuel Drain	**DRAIN AND SAMPLE**
Fuel Quantity	**CHECK**
Fuel Filler Cap	**SECURE**
Pitot Tube	**CHECK**
Fuel Tank Vent	**CHECK**
Stall Warning	**CHECK**
Chocks and Wing Tie Down	**REMOVE**

7. Left Wing Trailing Edge

Left Aileron	CHECK
Left Flap	CHECK
Hinges, actuation arm, pins.	CHECK
Preflight Checklist	COMPLETE

BEFORE STARTING ENGINE

Preflight Inspection	**COMPLETE**
Weight & Balance	VERIFY WITHIN LIMITS
Seat Belts & Shoulder Harness	**SECURE**
Fuel Shutoff Valve (Push In)	**ON**
Fuel Selector Valve	**BOTH**
Emergency Equipment	ON BOARD
Passengers	BRIEFED
Avionics Master	**OFF**
Cowl Flap	OPEN
Brakes	**TEST & SET AND HOLD**
Before Starting Eng. Checklist	COMPLETE

STARTING ENGINE

Start Clearance	Obtain
Beacon & Navigation Lights	ON
Mixture	**RICH**
Propeller	**HIGH RPM**
Throttle	**CLOSED**
Master	**ON**
Auxiliary Fuel Pump	**HIGH**
Throttle	**ADVANCE**
...Obtain 8-10 GPH Fuel Flow Then CLOSED	
Auxiliary Fuel Pump	**OFF**
Propeller Area	**CLEAR**
Ignition	**START**
.....Release to BOTH when engine starts.	
Throttle	**800 to 1000 RPM**
Oil Pressure	**CHECK**
Mixture	LEAN for TAXI
Starting Engine Checklist	COMPLETE

TAXI

Avionics Master	ON
Taxi Clearance	OBTAIN
Flaps	RETRACT
Radios and Avionics	SET
Transponder	SET/STAND BY
Parking Brake	RELEASE
Brakes	CHECK
Taxi Light	ON
Flight Instruments	CHECK
DG Orientation	CHECK
Turn Coordinator	CHECK
Taxi Checklist	COMPLETE

RUNUP

Parking Brake	**SET**
Doors/Windows	**CLOSED AND LOCKED**
Seats/Belts Harness	SECURE
Controls	**FREE & CORRECT**
Fuel Selector Valve	**BOTH**
Fuel Quantity	**CONFIRM**
Elevator Trim	**TAKE OFF**
Rudder Trim	**NEUTRAL**
Mixture	RICH
Throttle	**1800 RPM**
Mixture	Adjust 3000'+
Magnetos	**L&R THEN BOTH (150/50)**
Propeller	**CYCLE HIGH-LOW-HIGH**
Engine Instruments	**CHECK**
Alternator	**CHECK**
Ammeter / Voltage	**CHECK**
Suction Gauge	**CHECK**
Throttle	**IDLE 1000 RPM**
Throttle Friction Lock	**ADJUST**
Flight Instruments DG and Altimeter	SET
Brakes	RELEASE
RunUp Checklist	COMPLETE

CESSNA R172K COMPANY CHECKLIST

HK-5243-G

PRE-TAKEOFF

Emergency Procedures ..... REVIEW
Landing Light ..... ON
Transponder ..... ALT
Mixture ..... RICH
..... 150ºF RICHER REF. EGT
Pre-Takeoff Checklist..... COMPLETE

NORMAL TAKEOFF

Flaps..... UP
Power..... FULL THROTTLE 2600 RPM
Engines Parameters..... CHECK
Elevator Control ..... ROTATE Vr 55
Climb Speed..... 75 - 85 Vy
Brakes ..... APPLY Momentarily Airborne
Normal Takeoff Checklist..... COMPLETE

SHORT – FLD TAKEOFF

Flaps 10º
Brakes ..... APPLY
Power..... FULL THROTTLE 2600 RPM
Mixture ..... RICH
..... Above 3000 ft LEAN
Brakes ..... RELEASE
Engines Instruments..... CHECK
Elevator Control..... TAIL LOW
Climb 60
..... Then MAX PERFORMANCE CLIMB
Flaps ..... RETRACT
Brakes ..... APPLY Momentarily
Short Field Takeoff Checklist..... COMPLETE

NORMAL CLIMB

Airspeed 85
Power ..... FULL THROTTLE 2600 RPM
Fuel Selector Valve..... BOTH
Mixture ..... LEAN PER PLACARD

Alt	SL	4000	8000	12000
GPH	16	14	12	10

Cowl Flap ..... OPEN
Flaps ..... VERIFY UP
Normal Climb Checklist ..... COMPLETE

CRUISE

Power ...Per Performance Sheet 2300 RPM

Alt	2500	4000	6000	10000	12500
MP	22	21	20	17	17
GPH	8,6	8,4	8,1	7,0	6,8

Elevator & Rudder Trim..... ADJUST
Mixture .....LEAN for cruise fuel flow
Cowl Flap ..... CLOSED
Engine Parameters ..... MONITOR
Taxi & Landing Light ..... OFF
Cruise Checklist..... COMPLETE

DESCENT

App & Landing Briefing ..... COMPLETED
Altimeter ..... SET
Power ..... AS DESIRED
Mixture ..... ENRICH
Cowl Flap ..... CLOSED
Brake Pressure ..... CHECK
Taxi & Landing Light..... ON
Descent Checklist ..... COMPLETE

BEFORE LANDING

Seat Belts & Shoulder Harness ..... SECURE
Fuel Selector Valve..... BOTH
Manifold ..... 15 in
Airspeed 70
Flaps ..... AS DESIRED
Propeller..... HIGH RPM
Mixture ..... ENRICH
Cowl Flap ..... CLOSED
Airspeed 65
Before Landing Checklist ..... COMPLETE

GO - AROUND

Power ..... FULL THROTTLE 2600 RPM
Flaps (Immediately) .....RETRACT to 20º
Airspeed..... 55
Flaps... RETRACT Slowly After Reaching 65
Cowl Flap ..... OPEN
Go Around Checklist..... COMPLETE

NORMAL LANDING

Touchdown ..... MAINS FIRST
Landing Roll ..... LOWER NOSE GENTLY
Braking ..... MINIMUM REQUIRED
Normal Landing Checklist..... COMPLETE

AFTER LANDING

Throttle..... 1000RPM
Mixture ..... LEAN FOR TAXI
Flaps ..... RETRACT
Cowl Flap ..... OPEN
Transponder ..... STAND BY
Landing Light ..... OFF
After Landing Checklist..... COMPLETE

SHUTDOWN

Parking Brake ..... SET
Taxi Light ..... OFF
Avionics Master..... OFF
Throttle..... IDLE
Mixture ..... IDLE CUT-OFF
Ignition ..... OFF
Hobbs/Flight Ticket ..... RECORD
Master ..... OFF
All Switches ..... OFF
Shutdown Checklist ..... COMPLETE

SECURE

Fuel Selector Valve ..... RIGHT
Control Lock ..... INSTALL
Trash & Personal Items..... REMOVE
Doors/Windows ..... CLOSED & LOCKED
Tie-Downs and Chocks ..... SECURE & INSTALL
Secure Checklist..... COMPLETE

EMERGENCY PROCEDURES

ENGINE FAILURE DURING TAKEOFF RUN

Throttle ..... IDLE
Brakes ..... APPLY
Flaps ..... RETRACT
Mixture ..... IDLE CUT-OFF
Ignition ..... OFF
Master ..... OFF

ENGINE FAILURE AFTER TAKEOFF

Airspeed ..... 70 FLAPS UP
.....65 FLAPS DOWN
Mixture ..... IDLE CUT-OFF
Fuel Shutoff Valve ..... OFF
Ignition Switch ..... OFF
Flaps ..... AS REQUIRED
Throttle ..... IDLE
Master ..... OFF
Seat Belts..... ENSURE SECURED
Cabin Doors ..... UNLATCH
Land ..... STRAIGHT AHEAD

ENGINE FAILURE DURING FLIGHT

Airspeed 75
Primer..... IN and LOCKED
Fuel Shutoff Valve ..... ON
Fuel Selector Valve ..... BOTH
Mixture ..... RICH
Throttle ..... ½ OPEN
Aux Fuel PumpLOW 3-5 Seconds, Then OFF
Ignition ..... BOTH
.....(START If propeller has Stopped)

EMERGENCY SPEEDS KIAS

Engine Failure Airspeeds
Flaps UP 70
Flaps DOWN 65
Maneuvering
VA 2550 lbs 105
VA 2150 lbs 96
VA 1750 lbs 87
Best Glide (Flaps UP)
2550 lbs 75
2150 lbs 69
1750 lbs 62
Landing With Engine Power 65
Landing Without Engine Power
Flaps UP 70
Flaps DOWN 65

FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

Airspeed Flaps UP 70
Flaps Down 65
Throttle ..... IDLE
Mixture ..... IDLE CUT-OFF
Fuel Shutoff Valve ..... OFF
Ignition Switch ..... OFF
Flaps ..... AS REQUIRED
..... (FULL DOWN RECOMMENDED)
Master ..... OFF
Seats/Belts Harness ..... SECURE
Doors ..... UNLATCH
Touchdown ..... TAIL LOW
Brakes ..... APPLY HEAVILY

LANDING WITH ENGINE POWER

Seats/Belts/Harness ..... SECURE
Flaps 20º
Airspeed 65
Field ..... FLY OVER
Avionics Master ..... OFF
Flaps ..... FULL DOWN
Airspeed 65
Master ..... OFF
Doors ..... UNLATCH
Touchdown ..... TAIL LOW
Ignition ..... OFF
Brakes ..... APPLY HEAVILY

DITCHING

Seats/Belts ..... SECURE
Radio ..... MAYDAY 121.5
Transponder 7700
Heavy Objects ..... SECURE or JETTISON
Flaps ..... 20º - 40º
Power ..... 300 ft/min DESCENT at 55 KIAS

Approach:
High Winds/Seas ..... INTO THE WIND
Light Winds/Swells ..... PARALLEL

If no Power:
Flaps ..... UP / 65 KIAS
..... 10º / 60 KIAS

Cabin Doors ..... UNLATCH
Touchdown ..... LEVEL ATTITUDE
..... 300 FT/MIN DESCENT
Face ..... CUSHION
ELT ..... ACTIVATE
Airplane ..... EVACUATE
Life vest ..... INFLATE

FIRES

FIRE DURING ENGINE START

Auxiliary Fuel Pump ..... OFF
Mixture ..... IDLE CUT-OFF
Parking Brake ..... RELEASE
Fire Extinguisher ..... OBTAIN
Airplane ..... EVACUATE
Fire ..... EXTINGUISH
Fire Damage ..... INSPECT

ENGINE FIRE IN FLIGHT

Throttle ..... CLOSE
Mixture ..... IDLE CUT-OFF
Fuel Shutoff Valve ..... OFF
Master ..... OFF
Cabin Heat & Air ..... OFF
Airspeed 105
(If fire is not extinguished increase glide speed to find and airspeed which will provide an incombustible mixture)
Forced Landing ..... EXECUTE

ELECTRICAL FIRE

Master ..... OFF
Avionics Power ..... OFF
All Other Switches except Ignition ..... OFF
Vents/Cabin Air/Heat ..... CLOSED
Fire Extinguisher ..... ACTIVATE
Vents ..... OPEN When FIRE OUT
(If fire is out and electrical is necessary for flight)
Master ..... ON
Circuit Breakers ..... CHECK
(DO NOT RESET!)
Radios ..... OFF
Avionics Power ..... ON
Radios Electric ..... ON, one at a time
Vent/Air/Heat ..... OPEN

CABIN FIRE

Master ..... OFF
Vent/Air/Heat ..... CLOSED
Fire Extinguisher ..... ACTIVATE
Cabin ..... VENTILATE
Land ..... ASAP

WING FIRE

Navigation Light Switch ..... OFF
Pitot Heat Switch ..... OFF
(Perform side slip to keep flames away from the fuel tank and cabin)
Land ..... ASAP w/NO FLAPS

ICING

ICING ENCOUNTER

Pitot Heat ..... ON
Heading ..... TURN BACK
Altitude ..... CHANGE
Cabin Heat ..... ON
Defrost ..... ON
Propeller RPM ..... INCREASE
Throttle ..... INCREASE (Regain MP)
Flight ..... TERMINATE
Serious Icing ..... LAND OFF AIRPORT
Flaps ..... UP
Approach ..... Forward slip if required
Airspeed ..... 80 – 90
Touchdown ..... LEVEL

STATIC SOURCE BLOCKAGE

Alternate Static Source Valve ..... PULL ON
Airspeed ..... Consult table for appropriate Calibration

LANDING WITH A FLAT MAIN TIRE

Approach ..... NORMAL
Flaps ..... FULL DOWN
Touchdown ..... GOOD TIRE FIRST

ELECTRICAL MALFUNCTIONS

AMMETER SHOWS EXCESSIVE RATE OF CHARGE

Alternator..... OFF
Nonessential Electrical Equipment..... OFF
Flight ..... TERMINATE ASAP

OVER-VOLTAGE LIGHT

Avionics Power..... OFF
Master (BOTH SIDES) ..... OFF
Master..... ON
Over-Voltage Light .....CHECK OFF
Avionics Power..... ON
(If over-voltage light illuminates again)
Alternator..... OFF
Non - Essential Electrical..... OFF
Flight ..... TERMINATE
(As soon as practical)

AMMETER INDICATES DISCHARGE

Alternator..... OFF
Non - Essential Electrical..... OFF
Flight ..... TERMINATE
(As soon as practical)

SPIN RECOVERY

Throttle..... IDLE
Ailerons..... NEUTRALIZE
RudderFULL OPPOSITE DIRECTION OF SPIN
Yoke ..... BRISK FORWARD
Controls .... HOLD UNTIL ROTATION STOPS
Rudder ..... NEUTRALIZE
Spiral Dive.....RECOVER