

Preflight	Cessna 172R 160hp/180hp
1. Fuel Level	VISUAL CHECK
2. Hobbs Book	CHECK #'s
3. Paperwork	ARROW-AV1ATE
4. Seat Height	SET UP
5. Control Lock	REMOVE
6. Fuel Selector	BOTH, shutoff IN
7. Trim	SET "TAKEOFF"
8. Instruments	0's, INOP FLAGS
9. Master	ON
10. Fuel Qty	CHECK
11. Turn Coordinator	LISTEN
12. Flaps	DOWN
13. Beacon/Nav/Lights	CHECK LIGHTS
14. Annunciator Switch	TEST LIGHTS
15. Pitot Heat	CHECK
16. Master	OFF
17. Preflight	WALK AROUND
<input type="checkbox"/> Fuel Level	VISUAL CHECK
<input type="checkbox"/> Fuel Sumps	DRAIN 13 SUMPS
<input type="checkbox"/> Oil	6-8 Qts
<input type="checkbox"/> Static Port	CHECK
<input type="checkbox"/> 360 Walk	TIE-DOWNS

Passenger Briefing Checklist		
1.	Seat Belts	EXPLAIN and ON
2.	Door / Exiting Plane	EXPLAIN
3.	First Aid/Fire Ext	LOCATE
4.	Scanning for Traffic	ASSIST
5.	Exchange Controls	EXPLAIN
6.	Seat Rail Locks	CHECK

Engine Start Checklist		
1.	Brakes	SET
2.	Electrical	ALL OFF
3.	Circuit Breakers	ALL IN
4.	Mixture	IDLE CUT OFF
5.	Alternate Air	OFF
6.	Master Switch	ON
7.	Beacon	ON
8.	Fuel Pump	OFF
9.	Throttle	1/4 Inch Open
10.	Mixture	FULL RICH
11.	Fuel Pump	ON 3-5 seconds
12.	Fuel Pump	OFF (don't flood)
13.	Area	*****? CLEAR ?*****
14.	Magnetos/Starter	CRANK ENGINE
15.	Throttle	800-1000 RPM
16.	Mixture	LEAN for TAXI
17.	Oil Pressure	30 Sec. GREEN
18.	Flaps	UP
19.	Avionics Master	ON
20.	Instruments	DG to Compass
21.	Transponder	1200 "STANDBY"
22.	ATIS	SET Altimeter

Contact GROUND for Taxi to Runway
While Taxi Checklist

Brakes	TEST both sides
Verify Instruments	6 PACK CHECK
	Compass/TC/DG
	INTO WIND
Position at Run-up	

Run-Up Checklist		
1.	Brakes	SET
2.	Doors/Windows	CLOSED
3.	Belts/Harness	SECURED
4.	Controls	CHECK
5.	Trim	SET TAKEOFF
6.	Instruments	SET AI / DG
7.	Alt Static	PULL CHECK VSI
8.	Fuel Selector	ON BOTH
9.	Blast Area	CLEAR BEHIND
10.	Throttle	1800 RPM
11.	Engine Instruments	ALL GREEN
12.	Mixture	Rich then LEAN
13.	Magnetos	150 Max, 50 Diff
14.	Alternate Air	CHECK then OFF
15.	Ammeter Check	+CHARGING
16.	Vac/OilPress/Temp	ALL GREEN
17.	Throttle	800-1000 RPM
18.	IFR: Pitot Heat	Turn On for IFR

Ready for Takeoff Checklist	
Lights	STROBE/ NAV / LANDING
Camera	TRANSPONDER "Alt"
Action	Note TAKEOFF TIME
Review	Vspeeds
Review	Take Off Engine Loss
Review	WINDS

Contact Ground or Tower

Airspeeds	C172R
V1 abort takeoff	39 KIAS (50% Rwy)
Vs0 stall w/Flaps	33 KIAS
Vs1 stall clean	44 KIAS
Vr rotate	55 KIAS
Takeoff Climb	70-80 KIAS
Vy best rate	75 KIAS (79-71)
Vx best angle	62 KIAS (60-65)
Vbest glide	65 (160hp) / 70 (180hp)
Vfe flaps extend	85 KIAS full flaps
Va maneuvering	99 KIAS- 2450 lbs
Vno max cruise	129 KIAS
Vne never exceed	163 KIAS
Landing: 1900RPM	70 base/final - 65 over #'s
Takeoff Checklist	(Normal Takeoff)

Trim	SET TAKEOFF
Flaps	SET 0-10 Degrees
Vrotate	55 KIAS Vrotate
Climb Out	70-80 KIAS

Short Field Takeoff	
Flaps	10 DEGS
Vrotate	55 KIAS Vrotate
Vx	62 KIAS

Cruise/Climb Checklist	
1. Climb Airspeed	70-85 KIAS
2. Landing Light	OFF
3. Power	As RQD
4. Mixture	Lean As RQD

Descent Checklist	
1. Power	Reduce as RQD
2. Mixture	Enrichen as RQD

Pre Landing Checklist	
G - Gas	Selector BOTH
U - Undercarriage	GEAR DOWN
M - Mixture	RICH if Necessary
S - Switches	Landing Light ON
S - Safety	Seat Belts ON

Landing	
Downwind	80 KIAS @ 2100rpm
Abeam #'s	75 KIAS @ 1900rpm (10°)
Over the #'s	60-70 KIAS FULL FLAPS
Over the #'s	65-75 KIAS NO FLAPS
Short Field	62 KIAS over numbers
** Gusty or Cross Winds No Flaps, SLIP	

Go Around (ABORTED LANDING)	
Throttle	FULL THROTTLE
Flaps	UP, to 20 Degrees
Airspeed	Establish 70+ KIAS
Flaps	Bring up SLOWLY

Clear Runway Checklist	
Trim	SET "TAKEOFF"
Flaps	UP
Landing Light	OFF
Transponder	1200 "STDBY"

Shutdown Checklist	
Electrical	AVIONICS OFF
Throttle	IDLE
Mixture	IDLE CUTOFF
Magnetos	OFF
Master	OFF
Control Lock	SECURE
Tiedowns	FASTEN

CLOSE FLIGHT PLAN

Emergency Procedures

Engine Failure C172R

Memory Items ABCDE

A Airspeed 65 (160hp) / 70 (180hp)
B Best Place to Land (Check Wind Dir)
C Checklist TRY RESTART
D Declare Emergency 121.5 MAYDAY
 7700 IDENT
E Execute Landing Doors Open
 Belts..

ENGINE RESTART Procedures

Fuel Selector BOTH
 Aux Fuel Pump ON
 Mixture FULL RICH
 Throttle FULL THROTTLE
 Alternate Air ON
 Magnetos BOTH

Emergency Landing (without power)

Airspeed 65 (160hp) / 70 (180hp)
 Belts SECURE
 Cushions PROTECT HEAD
 Mixture IDLE CUTOFF
 Fuel Shutoff FUEL OFF
 Magnetos OFF
 Flaps FULL if possible
 Master OFF
 Doors OPEN
 Landing SOFT FIELD

Engine Fire in Flight

Mixture IDLE CUTOFF
 Fuel Shutoff FUEL OFF
 Cabin Air/Heat CLOSE VENTS
 Flaps FULL FLAPS
 Master OFF
 Airspeed TOP of WHITE 95 KIAS
 Bank Angle 45 DEGREES
 Proceed with "Emergency Landing"

Electrical Fire in Flight

Master OFF
 Avionics OFF
 All Switches OFF
 Vents/Cabin Air CLOSED
 Fire Extinguisher ACTIVATE
 Fire EXTINGUISHED
 Vents/Cabin Air VENT CABIN
 If electrical power is necessary, then:
 Master ON
 Circuit Breakers CHK, do not reset
 Radios OFF
 Avionics Master ON
 Radios/Switches ONE AT A TIME

Wing Fire

Navigation Lights OFF
 Pitot Heat OFF
 Strobe Lights OFF
 Side Slip PERFORM

Excessive Rate of Charge

Alternator OFF
 Alternator Breaker PULL OFF
 Nonessential Equipment OFF
 Flight Terminate ASAP

Low Voltage Light On

Avionics Master OFF
 Alternator Circuit Breaker CHECK IN
 Master (both sides) OFF
 Master (both sides) ON
 Low Voltage Light CHECK
 Avionics Master ON
 If low-voltage light illuminates again, then
 Alternator OFF
 Nonessential Radios/Equip OFF
 Flight Terminate ASAP

Lost - 'CCCCC'

Climb (Better radio range)
 Communicate (FSS, 121.5)
 Confess (Ask for help)
 Comply (Follow advice)
 Conserve (Fuel-slow down)

SPIN RECOVERY

Throttle IDLE
 Ailerons NEUTRAL
 Rudder OPPOSITE Rotation
 Elevator FWD BRISKLY
 Rotation STOPPED
 Controls NEUTRALIZE
 Recover SLOWLY

C172R Performance (180hp)

Fuel Capacity	53/56 Usable Gallons
Fuel Burn	~11 GPH
Range	~550 NM
Endurance	~4.5 Hours

Airport	WX	Twr-CTAF	TPA	Runways
KBJC	126.250	118.6/121.7	6500	30RL/12RL
KEIK	133.825	123.000	6200	34/16rp
KLMO	120.000	122.975	6000	29/11
KFNL	135.075	118.4/121.65	6000	33/15
KBDU	118.825	122.725	6300	8/26rp
KGXY	135.175	122.800	5500	35/17/28/10
KAPA	120.300	118.9/121.8	6900	35RL/17RL
Practice Area Longmont			123.175	
Practice Area Chatfield			122.750	
Emergency		121.500		
Flight Service		122.200		
Den App	(W)126.1	(N)134.85	(E)128.25	(S)128.45
KBJC Fuel Truck		(303) 466-2336	122.950	
KBJC Tower		(303) 633-8600		
IFR Clearance		(888) 766-8267		

Maneuver Configuration (Clearing Turns, Altitude, Landing Area)

Steep Turns	Flaps UP, Gear UP, xx"MP/xxxrpm, xxx KIAS, Add xx in Turn
Slow Flight	Flaps FULL, Gear DOWN, xx"MP then xx"MP Prop FULL, xx KIAS
Power On Stall	Flaps UP, Gear DOWN, xx"MP, Prop FULL, xx KIAS, then Full Power
Power Off Stall	Flaps DOWN, Gear DOWN, xx"MP, Prop FULL, Descend, then IDLE
Emergency Descent	Flaps DOWN, Gear DOWN, Prop FULL, Power IDLE, 30" xxx KIAS
Steep Spiral	Flaps UP, Gear UP, Prop FULL, Power IDLE, <60°, xx KIAS
Ground Ref	Flaps UP, Gear UP, Prop FULL, xx"MP, xxx KIAS
Chandelle	Flaps UP, Gear UP, Prop FULL, xx"MP, xxx KIAS, then Power FULL
Lazy 8	Flaps UP, Gear UP, Prop FULL, xx"MP, xxx KIAS