

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

Passenger Briefing Checklist

1. Seat Belts/Harness	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	FULL RICH
5. Carburetor Heat	OFF
6. Cowl Flaps	OPEN
7. Prime	AS REQ'D (2-4)
8. Primer	LOCKED
9. Master Switch	ON
10. Beacon	ON
11. Throttle	1/4 Inch Open
12. Area	*****? CLEAR ?*****
13. Magnetos/Starter	CRANK ENGINE
14. Throttle	800-1000 RPM
15. Mixture	LEAN for TAXI
16. Oil Pressure	30 Sec. GREEN
17. Flaps	UP
18. Avionics Master	ON
19. Instruments	DG to Compass
20. Transponder	1200 "STANDBY"
21. 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. Primer	LOCKED
9. Fuel Selector	ON BOTH
10. Blast Area	CLEAR BEHIND
11. Throttle	1700 RPM
12. Engine Instruments	ALL GREEN
13. Mixture	LEAN
14. Magnetos	125 Max, 75 Diff
15. Carburetor Heat	CHECK then OFF
16. Propeller	3 times, -300RPM
17. Ammeter Check	+CHARGING
18. Vac/OilPress/Temp	ALL GREEN
19. Throttle	800-1000 RPM
20. Cowl Flaps	OPEN
21. 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	C172RG
V1 abort takeoff	39 KIAS (50% Rwy)
Vs0 stall w/Flaps	42 KIAS
Vs1 stall clean	50 KIAS
Vr rotate	55 KIAS
Takeoff Climb	70-80 KIAS
Vy best rate	77 KIAS
Vx best angle	68 KIAS
Vbest glide	70 KIAS Glide
Vfe flaps extend	130 KIAS full flaps
Va maneuvering	106 KIAS- 2650 lbs
Vno max cruise	145 KIAS
Vne never exceed	164 KIAS
Vlo gear operation	140 KIAS
Vle gear extended	164 KIAS
Landing: 13" MP	75 base/final - 65 over #'s

Takeoff Checklist (Normal Takeoff)

Trim	SET TAKEOFF
Flaps	UP
Vrotate	55 KIAS Vrotate
Climb Out	70-80 KIAS
Landing Gear	UP when Clear

Short Field Takeoff

Flaps	UP (10deg SOFT)
Vrotate	55 KIAS Vrotate
Vx	63 KIAS

Cruise/Climb Checklist

1. Climb Airspeed	85-95 KIAS
2. Landing Light	OFF
3. Prop/Power	SET BOTH
4. Mixture	Lean As RQD
5. Cowl Flaps	AS RQD

Descent Checklist

1. Power	Reduce as RQD
2. Mixture	Enrichen as RQD
3. Carb Heat	ON as RQD
4. Cowl Flaps	CLOSED

Pre Landing Checklist

C - Cowl Flaps	CLOSE
C - Carb Heat	ON
G - Gas	ON BOTH
U - Undercarriage	GEAR DOWN
M - Mixture	RICH if Necessary
P - Props	FULL FWD
S - Switches	Landing Light ON
S - Safety	Seat Belts ON

Landing

Downwind	80 KIAS @ 20" MP
Abeam #'s	75 KIAS @ 15" MP (10°)
Over the #'s	60-70 KIAS FULL FLAPS
Over the #'s	75-95 KIAS NO FLAPS
Short Field	63 KIAS over numbers
** Gusty or Cross Winds	No Flaps, SLIP

Go Around (ABORTED LANDING)

Throttle	FULL THROTTLE
Carb Heat	OFF
Flaps	UP, to 20 Degrees
Airspeed	Establish 55+ KIAS
Flaps	Bring up SLOWLY

Clear Runway Checklist

Trim	SET "TAKEOFF"
Flaps	UP
Carb Heat	OFF
Landing Light	OFF
Transponder	1200 "STDBY"
Cowl Flaps	OPEN
IFR: Instruments	CHECK 6 pack

Shutdown Checklist

Electrical	AVIONICS OFF
Throttle	IDLE
Mixture	IDLE CUTOFF
Magnetos	OFF
Master	OFF
Cowl Flaps	CLOSED
Control Lock	SECURE
Tiedowns	FASTEN

CLOSE FLIGHT PLAN

Emergency Procedures

Engine Failure C172RG

Memory Items ABCDE

A Airspeed	70 KIAS
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
Mixture	FULL RICH
Throttle	FULL THROTTLE
Carb Heat	FULL ON
Magnetos	BOTH
Primer	LOCKED

Before TOUCHDOWN (forced landing)

Doors	OPEN
Belts	SECURE
Cushions	PROTECT HEAD
Mixture	IDLE CUTOFF
Fuel Selector	OFF
Magnetos	OFF
Flaps	FULL
Master	OFF
Landing	SOFT FIELD

Engine Fire in Flight

Mixture	IDLE CUTOFF
Fuel Selector	OFF
Cabin Air/Heat	CLOSE VENTS
Flaps	FULL FLAPS
Master	OFF
Airspeed	TOP of WHITE 95 KIAS
Bank Angle	45 DEGREES

Proceed with Engine Failure Above

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

Emergency Gear Extension

Master Switch	ON
Circuit Breakers	CHECK IN
Gear Lever	Down
Gear Indicator Bulbs	CHECK / SWAP
Emergency Hand Pump	EXTEND HANDLE
Pump until gear down indication (~35 cycles)	

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	NUETRALIZE
Recover	SLOWLY

C172RG Performance (180hp)

Fuel Capacity	62 Usable Gallons
Fuel Burn	~10 GPH
Range	~650 NM
Endurance	~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