

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

### Passenger Briefing Checklist

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

### Engine Start Checklist

1. Brakes	<b>SET</b>
2. Electrical	<b>ALL OFF</b>
3. Circuit Breakers	<b>ALL IN</b>
4. Mixture	<b>FULL RICH</b>
5. Carburetor Heat	<b>OFF</b>
6. Prime	<b>AS REQ'D (2-4)</b>
7. Primer	<b>LOCKED</b>
8. Master Switch	<b>ON</b>
9. Beacon	<b>ON</b>
10. Throttle	<b>1/4 Inch Open</b>
11. Area	<b>*****"CLEAR"*****</b>
12. Magnetos/Starter	<b>CRANK ENGINE</b>
13. Throttle	<b>800-1000 RPM</b>
14. Mixture	<b>LEAN for TAXI</b>
15. Oil Pressure	<b>30 Sec. GREEN</b>
16. Flaps	<b>UP</b>
17. Avionics Master	<b>ON</b>
18. Instruments	<b>DG to Compass</b>
19. Transponder	<b>1200 "STANDBY"</b>
20. Radios	<b>TUNE, TEST</b>
21. ATIS	<b>SET Altimeter</b>

**Contact GROUND for Taxi to Runway**

### While Taxi Checklist

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

### Run-Up Checklist

1. Brakes	<b>SET</b>
2. Doors/Windows	<b>CLOSED</b>
3. Belts/Harness	<b>SECURED</b>
4. Controls	<b>CHECK</b>
5. Trim	<b>SET TAKEOFF</b>
6. Instruments	<b>SET AI / DG</b>
7. Alt Static	<b>PULL CHECK VSI</b>
8. Primer	<b>LOCKED</b>
9. Fuel Selector	<b>ON BOTH</b>
10. Blast Area	<b>CLEAR BEHIND</b>
11. Throttle	<b>1700 RPM</b>
12. Engine Instruments	<b>ALL GREEN</b>
13. Mixture	<b>LEAN</b>
14. Magnetos	<b>125 Max, 75 Diff</b>
15. Carburetor Heat	<b>CHECK then OFF</b>
16. Ammeter Check	<b>+CHARGING</b>
17. Vac/OilPress/Temp	<b>ALL GREEN</b>
18. Throttle	<b>800-1000 RPM</b>
19. IFR: Pitot Heat	<b>Turn On for IFR</b>

### Ready for Takeoff Checklist

Lights	<b>STROBE/ NAV / LANDING</b>
Camera	<b>TRANSPONDER "Alt"</b>
Action	<b>Note TAKEOFF TIME</b>
Review	<b>Vspeeds</b>
Review	<b>Take Off Engine Loss</b>
Review	<b>WINDS</b>

**Contact Ground or Tower**

Airspeeds	C172N
V1 abort takeoff	<b>39 KIAS (50% Rwy)</b>
Vs0 stall w/Flaps	<b>44 KIAS</b>
Vs1 stall clean	<b>50 KIAS</b>
Vr rotate	<b>55 KIAS</b>
Takeoff Climb	<b>70-80 KIAS</b>
Vy best rate	<b>70 KIAS</b>
Vx best angle	<b>60 KIAS</b>
Vbest glide	<b>65 KIAS Glide</b>
Vfe flaps extend	<b>85 KIAS full flaps</b>
Va maneuvering	<b>97 KIAS- 2300 lbs</b>
Vno max cruise	<b>128 KIAS</b>
Vne never exceed	<b>160 KIAS</b>
Landing: 1700RPM	<b>70 base/final - 60 over #'s</b>

### Takeoff Checklist (Normal Takeoff)

Trim	<b>SET TAKEOFF</b>
Flaps	<b>UP</b>
Vrotate	<b>55 KIAS Vrotate</b>
Climb Out	<b>70-80 KIAS</b>

### Short Field Takeoff

Flaps	<b>UP (10degs SOFT)</b>
Vrotate	<b>55 KIAS Vrotate</b>
Vx	<b>60 KIAS</b>

### Cruise/Climb Checklist

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

### Descent Checklist

1. Power	<b>Reduce as RQD</b>
2. Mixture	<b>Enrichen as RQD</b>
3. Carb Heat	<b>ON as RQD</b>

### Pre Landing Checklist

C - Carb Heat	<b>ON</b>
G - Gas	<b>Selector BOTH</b>
U - Undercarriage	<b>GEAR DOWN</b>
M - Mixture	<b>ENRICHEN</b>
S - Switches	<b>Landing Light ON</b>
S - Safety	<b>Seat Belts ON</b>

### Landing

Downwind	<b>80 KIAS @ 1900rpm</b>
Abeam #'s	<b>70 KIAS @ 1700rpm (10°)</b>
Over the #'s	<b>55-60 KIAS FULL FLAPS</b>
Over the #'s	<b>60-70 KIAS NO FLAPS</b>
Short Field	<b>60 KIAS over numbers</b>
** Gusty or Cross Winds	<b>No Flaps, SLIP</b>

### Go Around (ABORTED LANDING)

Throttle	<b>FULL THROTTLE</b>
Flaps	<b>UP, to 20 Degrees</b>
Airspeed	<b>Establish 60+ KIAS</b>
Flaps	<b>Bring up SLOWLY</b>

### Clear Runway Checklist

Trim	<b>SET "TAKEOFF"</b>
Flaps	<b>UP</b>
Carb Heat	<b>OFF</b>
Landing Light	<b>OFF</b>
Transponder	<b>1200 "STDBY"</b>
IFR: Instruments	<b>CHECK 6 pack</b>

### Shutdown Checklist

Electrical	<b>AVIONICS OFF</b>
Throttle	<b>IDLE</b>
Mixture	<b>IDLE CUTOFF</b>
Magnetos	<b>OFF</b>
Master	<b>OFF</b>
Control Lock	<b>SECURE</b>
Tiedowns	<b>FASTEN</b>

**CLOSE FLIGHT PLAN**

# Emergency Procedures

## Engine Failure C172N

### Memory Items ABCDE

<b>A</b> Airspeed	<b>65 KIAS</b>
<b>B</b> Best Place to Land	<b>(Check Wind Dir)</b>
<b>C</b> Checklist	<b>TRY RESTART</b>
<b>D</b> Declare Emergency	<b>121.5 MAYDAY</b>
	<b>7700 IDENT</b>
<b>E</b> Execute Landing	<b>Doors Open</b>
	<b>Seat Belts</b>

### ENGINE RESTART Procedures

Fuel Selector	BOTH
Mixture	FULL RICH
Throttle	FULL THROTTLE
Carburetor Heat	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 POSSIBLE
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
<b>Proceed with Engine Failure Above</b>	

## 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	NUETRALIZE
Recover	SLOWLY

## C172N Performance (160hp)

Fuel Capacity	40 Usable Gallons
Fuel Burn	~8 GPH
Range	~500 NM
Endurance	~4 Hours

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

## Maneuver Configuration (Clearing Turns, Altitude, Landing Area)

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