ORLANDI

Cessna — CheckMate® — 172 I,K,L

INITIAL
Weather & Den.Alt.
Weight & Balance
Performance Req.
Flight Plan – File
Papers – A.R.O.W.
Fuel – Both
Control Lock
Master – On
Flaps – Extend
Pitot Heat – Test
Lights – Int. / Ext.
Fuel Gauges – True
Master – Off

EXTERIOR SUMMARY
After Geographical Check

Fuel Quantity
Fuel Quality
Caps / Drains / Vents
Engine / Oil / Belt
Prop / Air Intake
Exhaust System
Stall Indicator – Test
Surfaces & Controls
Pitot & Static Ports
Gear / Tires / Brakes
Antennas
Ties / Chocks
Baggage Door
Final Walk Around

INTERIOR
Passenger Brief
Hobbs / Tach Time
Circuit Breakers
Alternate Static
Brakes - Pedal Test

START
Seat Track/Back–Lock
Avionics – Off
Autopilot – Off
Carb Heat – Off
Beacon – On
Mixture – Full Rich
Throttle – Slight Prime
Brakes
Prop – Clear
Master – On
Mags – Start
Oil Pressure
Lights – As Req.
Mixture – As Req.

PRE-TAXI / TAXI
Seat Belts / Harness
Flaps – Up
Heat / Vent / Defrost
Avionics - On / Set
XPDR – STBY
ATIS / AWOS
Altimeter – Set
Radio – Test
Taxi Light – As Req.
Brakes – Test
Attitude Indic.–Test
Turn Coord. – Test
H.I. / Compass–Test

RUN-UP
Brakes – Set
Fuel – Both
Trim – Takeoff
Flight Controls
Instruments
Mixture – Best Power
Primer – In & Lock

1700 RPM
Mags (R&L) – Test
Carb Heat – Test
Vacuum
Amps / Volts
Oil Pressure
Oil Temperature
Idle – Check Closed
Throttle Friction

PRE-TAKEOFF
Flaps – 0°- 10°
Mixture – Best Power
Carb Heat-Off *Or As Req.*
Pitot Heat – As Req.
H.I. To Compass
Doors / Windows
XPDR – Alt + Sqwk
Landing Light – On
Strobes – On
Time – Note
Brakes – Release

Abort Plan - Ready!

TAKEOFF
Full Throttle
2260 RPM *(Min)*
Oil Pressure
Rotate * 52 *(60)*
Vy – 71 *(82)*
Flaps – Up

CLIMB
70-78 *(80-90)*
Power
Mixture
Instruments
Taxi / Land Light – Off
Flight Plan – Open

CRUISE
Power
Mixture
Instruments
H.I. To Compass

DESCENT
Mixture – Richen
Fuel – Both
Carb Heat–As Req.
ATIS / AWOS
Altimeter – Set
Instruments
H.I. To Compass

PRE-LANDING
Landing Light – On
Autopilot – Off
Seat Belt / Harness
Mixture – Best Power
Carb Heat – On
Fuel – Both
Flaps – As Req.

LANDING
Flaps – 40° *Or As Req.*
Speed * 61 *(70)*

G.U.M.P.F.S.

GO AROUND
Power – Full
Carb Heat – Off
Positive Rate Climb
Flaps – Retract Slowly

AFTER LANDING
Flaps – Up
Carb Heat – Off
Strobes – Off
Landing Light – Off
Taxi Light – As Req.
Pitot Heat – Off
Mixture – As Req.
Trim – Takeoff
XPDR – STBY

SECURING
ELT – Verify Silent
Avionics – Off
Mixture – Full Lean
Mags – Off
Master – Off
Fuel – Left or Right
Lights – Off
Hobbs / Tach Time
Control Lock
Chocks
Tie Downs
Pitot Cover
Baggage Door
Cabin Doors

Close Flight Plan

* *Adjust Speed As Needed For Conditions*

Vr • Rotation Speed – 52 *(60)*
Vx • Best Angle Climb – 59 *(68)*
Vy • Best Rate Climb – 71 *(82)*

Vs_0 • Stall with flaps – 43 [1] *(49)*
Vs • Stall without flaps – 50 [1] *(57)*
Best Glide *(2000 lbs)* – 65 *(75)*
Best Glide *(Full Gross)* – 70 *(80)*

Va • Max Abrupt *(2000 lbs)* – 99 *(114)*
Va • Max Abrupt *(Full Gross)* – 106 *(122)*
Vno • Max Structural Cruise – 122 *(140)*
Vne • Never Exceed – 151 *(174)*

Vfe • Full Flaps – 87 *(100)*
X Wind • Max Demo'd – 13 *(15)*

	KNOTS *(MPH)*	FLAPS °	– NOTES –
DEPARTURE			[1] *Stall Speeds Are CAS*
Rotation *	52 *(60)*	0	Short Field w/Obstacle: 0° Flaps
Best Angle Climb	59 *(68)*	0	Short w/o Obstacle or Soft: 10° Flaps
Best Rate Climb	71 *(82)*	0	
CRUISE *(TAS -5,000')*			
Economy	95 *(109)*	0	2300 RPM – 6.5 GPH – 55%
Normal	107 *(123)*	0	2500 RPM – 7.4 GPH – 68%
Maximum	112 *(129)*	0	2600 RPM – 8.1 GPH – 75%
ARRIVAL			
Approach	70 *(80)*	10-20	1700 RPM *(Initially)*
Short Final *	61 *(70)*	30-40	Idle-1200 RPM

Specs Are Approximate Because Of Environment & Plane Model / Year Variables. Specs Are In: LBS, KIAS, Sea Level, Standard Day, Normal Category, Max.Gross Wt., No Wind, "Best Power", Wheel Pants, New Engine. ( ) = *MPH*.

VERTICAL SCALE = NAUTICAL MILES PER INCH: WAC = 14 SEC = 7 TAC = 3.5 NOS = 12 JEPP = 15 ELA = 12

ORLANDI

POWER LOSS IMMEDIATELY AFTER TAKEOFF / NO RESTART

MAINTAIN AIRCRAFT CONTROL
BEST GLIDE – 70 KIAS *(80 MPH)* *(Full Gross Weight)*
FUEL SELECTOR – OFF
MIXTURE – FULL LEAN / IDLE CUTOFF
FLAPS – DOWN
MASTER & MAGS – OFF *(Unlatch Doors)*

POWER LOSS IN FLIGHT

BEST GLIDE – 70 KIAS *(80 MPH)* *(Full Gross Weight)*
CARB HEAT – ON *(Also Supplies Alternate Air)*
NOTE WIND DIRECTION & VELOCITY
PICK LANDING SITE
MIXTURE – FULL RICH
FUEL SELECTOR – CHECK / SWITCH / BOTH *(Note Gauges)*
FUEL PRIMER – LOCKED *(Try Re-Priming)*
MAGNETOS – CHECK ALL
MASTER – ON

IF NO RESTART & TIME PERMITS

MAINTAIN BEST GLIDE
SQUAWK 7700
DECLARE EMERGENCY *(TWR, APP, Unicom, 121.5)*
FUEL SELECTOR – OFF
MIXTURE – FULL LEAN / IDLE CUTOFF
SEATBELTS / HARNESS
FLAPS – AS NEEDED *(Full Flaps When Field Assured)*
MASTER & MAGS – OFF
UNLATCH DOORS
PROTECT BODY

ELECTRICAL FIRE IN FLIGHT

ALL ELECTRICAL DEVICES + MASTER OFF *(Mags On)*
CABIN HEAT & AIR – OFF
IF FIRE OUT – MASTER ON ONLY IF CRITICAL *(Vents – Open)*
THEN ONE ESSENTIAL ELECRICAL DEVICE AT A TIME
RESET CIRCUIT BREAKER ONLY IF CRITICAL

ENGINE FIRE IN FLIGHT

MIXTURE – FULL LEAN / IDLE CUTOFF
FUEL SELECTOR – OFF
MASTER SWITCH – OFF
CABIN HEAT & AIR – OFF *(Except Overhead Vents)*
INCREASE AIRSPEED TO EXTINGUISH – LAND ASAP

ENGINE FIRE DURING START

CONTINUE CRANKING ENGINE
IF START – RUN A FEW SECONDS - SHUTDOWN - INSPECT
IF NO START – IDLE MIXTURE CUTOFF & FUEL SELECTOR OFF
THROTTLE FULL OPEN
CONTINUE CRANKING ENGINE A FEW SECONDS
MASTER & MAGS – OFF
EVACUATE / FIRE EXTINGUISHER

ICING

PITOT HEAT – ON
CARB HEAT – ON
CABIN HEAT & DEFROST – MAXIMUM
STRONGLY CONSIDER 180° TURN
ATTAIN HIGHER OR LOWER ALTITUDE
INCREASE ENGINE SPEED
FLAPS – NOT RECOMMENDED FOR LANDING
LAND FASTER AS NEEDED

OTHER

EXCESSIVE RATE OF CHARGE: Over Voltage Warning Light Will Illuminate If Reaches Approx. 16 Volts. To Reactivate, Turn Both Sides Of The Master Switch Off / Then On Again. If Light Comes On Again, Terminate Flight A.S.A.P.

INSUFFICIENT RATE OF CHARGE: Nonessential Electric – Off / Terminate Flight A.S.A.P.

RADIO OUT: Check Circuit Breakers & VOLUME
Recycle Alternator Switch
If IFR & Still Out, Set XPDR To 7600.
(Suggested For VFR If In B, C, D Airspace.)

UNICOM: 122.7 – 122.8 – 122.95 – 123.0 – 123.05
MULTICOM: 122.9 *(CTAF)*, 122.75, 122.85 *(Air To Air)*
FLIGHT WATCH: 122.0

TOWER SIGNALS	ON GROUND	IN FLIGHT
Steady Green	Cleared For Takeoff	Cleared To Land
Flashing Green	Cleared To Taxi	Return For Landing
Steady Red	Stop	Yield & Continue Circling
Flashing Red	Taxi Clear of Landing Area	Airport Unsafe - Do Not Land
Flashing White	Return To Starting Point	N/A
Alternating Red & Green	Use Extreme Caution	Use Extreme Caution

* *Every Plane Has A Different Empty Weight And Useful Load*
Cessna 172 I,K,L *Lycoming: O-320-E2D, 150 HP*

*** Empty Weight:** 1420.6K/1407.35L Weight)
*** Max. Useful Load:** 879.4K/892.65L uel @ 6 lbs/gal)
Max. Baggage Area: 120 LBS *(Included In Useful Load)*
Max. T.O. Weight: 2300 LBS

Fuel Type: 100 LL *(Blue)* / 100 *(Green)* / 80/87 *(Red)*
Usable Fuel: 38 Gallons *(48 L.R Tanks)*
Oil Capacity: 8 Quarts *(Minimum 6)*
Electrical: 12-14 VOLT / 60 AMP

Tire Pressure: Nose - 26 PSI *(5.00 x 5)* *(172 I,K)*
31 PSI *(6.00 x 6)* *(172 I,K,L)*
Main - 24 PSI *(6.00 x 6)* *(172 I,K)*
29 PSI *(6.00 x 6)* *(172 L)*