

INITIAL

Weather & Perf. Alt. Wt & Bal/Perf. Req. Papers - A.R.O.W. Fuel Valve - On/Both Control Lock Master - On PFD - Verify On Flaps - Extend Low Fuel Lights- Off Fuel Gauges - True Annunciator - Verify

Avionics:
Bus 1- On (Check Fan)
Bus 2- Off, 2 On (Check Fan)
Bus 2- Off

Stall Indicator - Test Pitot Heat - Test Lights - Int./Ext. Master - Off

EXTERIOR SUMMARY
After Geographical Check

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

INTERIOR

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

START

Seat Track/Back-Lock Avionics Bus 1&2 - Off AP / Alt. Static - Off Throttle - 1/4" Mixture - Full Lean STBY BATT-Test/Arm (Verify PFD Comes On) Engine Indicating Sys. Bus E VOLTS - 24 MIN M BUS VOLTS-1.5 OR LESS BATT'S AMPS - DISCHARGE STBY BATT - Verify On Beacon - On Prop - Clear Master - On Fuel Pump - On⁽¹⁾ Mixture-Rich (Prime) (3-5 Seconds) Fuel Pump-Off Mags - Start Mixture - Rich Oil Pressure AMPS (M & S BATT) Annunciator Lights - As Req. Mixture - As Req. Avionics (Bus 1&2) - On

PRE-TAXI / TAXI

Seat Belts / Harness Flaps - Up Heat / Vent / Defrost ATIS / AWOS Altimeter - Set XPDR - Alt + Sqwk ADS-B - On Taxi Light - As Req. Brakes - Test Attitude Indic.-Test Turn Coord. - Test H.S.I./Compass-Test

RUN-UP

Brakes - Set Fuel Valve - Both Trim - Takeoff Flight Controls Instruments - No Red X's

Altimeters:
PFD (Baro) - Set Standby Alt. - Set KAP 140 AP - Set

G1000 Alt. SEL - Set KAP 140 Alt. Preslect - Set Standby Instruments Mixture - Best Power

MET System - Test (Manual Electric Trim) 1800 RPM Mags (R & L) - Test VAC Indicator Engine Indicators Amps / Volts Annunciators Idle (-575-625 RPM) Ck Mixture - Lean to Ck (10 Min-50 Max RPM Rise) Throttle Friction COM/NAV - Set

FMS/GPS
(Verify GPS2 Available on AUX-GPS Status Page)

CDI Softkey - Nav Source

PRE-TAKEOFF

Flaps - 0°-10° Mixture - Best Power Pitot Heat - As Req. XPDR - Alt + Sqwk Doors / Windows Heading Bug Landing Light - On Strobes - On Time - Note Brakes - Release

Abort Plan - Ready!

TAKEOFF

Full Throttle (2300-2400 RPM) Oil Pressure Rotate * 55 (63) Vy - 74 (85) Flaps - Up

CLIMB

70-85 (81-98) Throttle - Full Mixture - Lean >3K Instruments Taxi / Land Light - Off Flight Plan - Open

CRUISE

Power Mixture Instruments H.S.I. To Compass FMS / GPS - Review

Brief OBS / SUSP
Softkey Ops For Holding Pattern Procedure (IFR)

DESCENT

Power - As Req. Mixture - Richen Fuel Valve - Both ATIS / AWOS

Altimeters:
PFD (Baro) - Set Standby Alt. - Set KAP 140 AP - Set

G1000 Alt. SEL - Set KAP 140 Alt. Preslect - Set Instruments H.S.I. To Compass CDI Softkey - Nav Source

FMS/GPS - Review
Brief OBS/SUSP Softkey Ops For Holding Pattern Procedure (IFR)

PRE-LANDING

Landing Light - On Autopilot - Off Seat Belts / Harness Mixture - Best Power Fuel Valve - Both Flaps - As Req.

LANDING

Flaps - 30° Or As Req. Speed * 65 (75)

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

GO AROUND
Power - Full Flaps - 20° Positive Rate Climb Flaps - Retract Slowly

AFTER LANDING

Flaps - Up Strobes - Off Landing Light - Off Taxi Light - As Req. Pitot Heat - As Req. Mixture - As Req. Trim - Takeoff XPDR - Alt + Sqwk

SECURING

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

Close Flight Plan

* Adjust Speed As Needed For Conditions

X Wind * Max Demold - 15 (17)	Vs * Stall with flaps - 40 (46)	Va * Max Abrupt Ctrl (1900 lbs) - 90 (104)	Vfe * 10° Flaps - 110 (127)
Vr * Rotation Speed - 55 (63)	Vs * Stall w/o flaps - 48 (55)	Va * Max Abrupt (Full Gross) - 105 (121)	Vfe * Full Flaps - 85 (98)
Vx * Best Angle Climb - 62 (71)	Best Glide (1900 lbs) - 59 (68)	Vno * Max Structural Cruise - 129 (148)	Chandelles/Lazy Eights - 105 (121)
Vy * Best Rate Climb - 74 (85)	Best Glide (Full Gross) - 68 (78)	Vne * Never Exceed - 163 (187)	Steeep Turns - 95 (109)

KNOTS (MPH)

FLAPS °

- NOTES -

DEPARTURE

Rotation *	55 (63)	0
Best Angle Climb	62 (71)	0
Best Rate Climb	74 (85)	0

(1) Hot Start - Do not prime

Short Field: 10° Flaps - 56 (64) Until Clear

Soft Field: 10° Flaps

CRUISE (TAS-8,000')

Economy	106 (122)	0
Normal	112 (129)	0
Maximum	119 (137)	0

2400 RPM - 7.8 GPH - 54%
2500 RPM - 8.6 GPH - 61%
2600 RPM - 9.4 GPH - 68%

ARRIVAL

Approach	75 (86)	10-20
Short Final *	65 (75)	30

1700 RPM (Initially)
Idle - 1200 RPM

WARNING: Permission to use this CheckMate is granted to the authorized purchaser only. No warranties, either express or implied, of any kind, are made hereunder, including, but not limited to any warranties for fitness for particular use. The information contained herein varies according to individual aircraft, model, and year of manufacture and while we believe the information to be accurate, no representations are made as to the degree of accuracy of the information. This information constitutes only partial information necessary to properly operate an aircraft and is not to be used as a substitute for the use of other information sources routinely used in the operation of aircraft or the acquisition of requisite training to operate aircraft. Purchaser assumes all risk of use in using this product. Purchaser consent to and understands that CheckMate Aviation, Inc. or any related entity, bears no liability for the use of this product.

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.

© ALL RIGHTS RESERVED 7.82
CheckMate Aviation Inc. 800-359-3741 1992-2016

(IF UNABLE TO ABORT TAKEOFF)

POWER LOSS IMMEDIATELY AFTER TAKEOFF / NO RESTART

MAINTAIN AIRCRAFT CONTROL

AIRSPPEED - 70 KIAS (81 MPH)(Gross Weight / Flaps Up)

FUEL SELECTOR - OFF (Pull Full Out)

MIXTURE - FULL LEAN / IDLE CUTOFF

FLAPS - DOWN 65 KIAS (75 MPH)

MASTER & MAGS - OFF (Unlatch Doors)

POWER LOSS IN FLIGHT

BEST GLIDE - 68 KIAS (78 MPH) (Full Gross Weight)

NOTE WIND DIRECTION & VELOCITY

PICK LANDING SITE

FUEL SHUTOFF VALVE - ON (Push Full In)

FUEL PUMP - ON

MIXTURE - FULL RICH (To Restart, Lean As Req)

FUEL SELECTOR - CHECK / BOTH (Note Gauges)

MAGNETOS - CHECK ALL (Start If Prop Stopped)

AUX FUEL PUMP - OFF

IF NO RESTART & TIME PERMITS

MAINTAIN BEST GLIDE

SQUAWK 7700

DECLARE EMERGENCY (TWR, APP, Unicom, 121.5)

MIXTURE - FULL LEAN / IDLE CUTOFF

FUEL SHUTOFF VALVE - OFF (Pull Full Out)

SEATBELTS / HARNESS

FLAPS - AS NEEDED (Full Flaps Recommended For Landing)

MASTER & MAGS - OFF 65 KIAS (75 MPH)

UNLATCH DOORS

PROTECT BODY

ELECTRICAL FIRE IN FLIGHT

ALL ELECTRICAL DEVICES + MASTER - OFF (Mags On)

CLOSE VENTS, CABIN HEAT, & AIR (Fire Extinguisher)

AVIONICS MASTER - OFF

IF FIRE OUT - MASTER ON ONLY IF CRITICAL (Vents - Open)

THEN ONE ESSENTIAL ELECTRICAL DEVICE AT A TIME

RESET CIRCUIT BREAKER(S) ONLY IF CRITICAL

ENGINE FIRE IN FLIGHT

MIXTURE - FULL LEAN / IDLE CUTOFF

FUEL SHUTOFF VALVE - OFF (Pull Full Out)

AUX FUEL PUMP - OFF

MASTER - OFF (Standby BATT - Off)

CABIN HEAT & AIR - OFF (Except Overhead Vents)

AIRSPPEED 100 KIAS OR HIGHER TO EXTINGUISH - LAND ASAP

ENGINE FIRE DURING START

CONTINUE CRANKING ENGINE

IF START - 1800 RPM A FEW MINUTES - SHUTDOWN - INSPECT

IF NO START - MIXTURE IDLE CUTOFF & FUEL VALVE OFF

THROTTLE FULL OPEN

CONTINUE CRANKING ENGINE A FEW SECONDS

MASTER & MAGS - OFF

EVACUATE / FIRE EXTINGUISHER

AIR DATA SYSTEM & AHRS FAILURE

RED X-PFD AIRSPEED INDICATOR: ADC/AHRS CBs-Check In (ESS BUS & AVN BUS 1). If Open, Reset. If Opens Again, Do Not Reset

RED X-PFD ALTITUDE INDICATOR: Same As Above Except Use Standby Altimeter. (Ck & Set Barometric Pressure)

RED X-PFD ATTITUDE INDICATOR: Same As Above Except Use Standby Attitude Indicator.

RED X-HORIZONTAL SITUATION INDICATOR (HSI): ADC/AHRS CBs-Check In (ESS BUS & AVN BUS 1). If Open, Reset. If Opens Again, Do Not Reset. Use Non-Stabilized Mag Compass For Heading Information.

ELECTRICAL POWER MALFUNCTIONS

HIGH MAIN BATT CHARGE CURRENT (OVER 40 AMPS):

MASTER (ALT) - Off, Nonessential Electric - Off, Avionics Bus 1 & 2 - Off Terminate Flight A.S.A.P.

LOW VOLTAGE: Avionics Bus 1 & 2 - Off, ALT C.B. - In, Master - Off, then, MASTER - On, Ck. Volt Lt. Off, M BUS VOLTS - 27.5 V Min., M BATT AMPS - Check Charging, Avionics Bus 1 & 2 - On.

If Illuminates Again: ALT & Non-Essential Avionics & Electric - Off (Pull CBs On Avionics), 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)

F.S.S.: 122.000 To 122.675, Most Common - 122.2

EMERGENCY: 121.5

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 S/SP G1000 (Lycoming IO-360-L2A, 180HP)

* **Empty Weight:** LBS (Specific Plane Weight)

* **Max. Useful Load:** LBS (Including Fuel @ 6 lbs/gal)

Max. Baggage Area: 120 LBS (Included In Useful Load)

Max. T.O. Weight: 2550 LBS Utility T.O. Wt: 2200 LBS

Ramp Weight: 2558 LBS

Fuel Type: 100 LL (Blue) / 100 (Green)

Usable Fuel: 53 Gallons

Oil Capacity: 8 Quarts (Minimum 5)

Electrical: 24-28 VOLT / 60 AMP

Tire Pressure: Nose - 45 PSI / Main - 38 PSI

© All Rights Reserved, CheckMate Aviation Inc. 1992-2017