

INITIAL

Weather & Den. Alt.
Weight & Balance
Performance Req.
Flight Plan - File
Papers - A.R.O.W.
Flaps - Extend
Master - On
Pitot Heat - Test
Stall Indicator - Test
Lights - Int. / Ext.
Fuel Gauges - True
Master - Off
Sump Drain Knob

EXTERIOR SUMMARY
(After Thorough Geographical Check)

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

INTERIOR

Flaps - Up
Passenger-Load/Brief
Hobbs / Tach Time
Fuel - Proper Tank
Circuit Breakers
Alternate Static
Pitot / Static - Drain/Close
ELT - Armed

START

Seat Track/Back-Lock
Avionics - Off
AP / AC - Off
Carb Heat - Off
Prop - High RPM
Throttle - Slight
Brakes
Master - On
Beacon - On
Fuel Pump - On
Mixture - Full Rich⁽¹⁾
Prime - As Req.
Prop - Clear
Mags - Start/Press
Oil Pressure
Fuel Pump - Off
Fuel Pressure
Lights - As Req.
Mixture - As Req.

PRE-TAXI / TAXI

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

RUN-UP

Brakes
Fuel - Proper Tank
Trim - Takeoff
Flight Controls
Instruments
Annunciator Panel
Mixture - Best Power
Primer - In & Lock
2000 RPM
Mags - Test R-L-Both
Carb Heat - Test
Prop - Cycle
Vacuum
Amps / Volts
Oil Pressure
Oil Temperature
Idle - Check Closed
Friction Lock

PRE-TAKEOFF

Flaps - 0°-25°
Prop - High RPM
Mixture - Best Power
Carb Heat - Off *Or As Req.*
AC - Off
Fuel Pump - On
Pitot Heat - As Req.
XPDR - Alt + Sqwk
Heading Bug
Doors / Windows
Landing Light - On
Strobes - On
Time - Note
Brakes - Release

ABORT PLAN - READY!

TAKEOFF

Full Throttle
2575 RPM *Max*
Manifold Pressure
Oil Pressure
Rotate - * **52** (60)
Vy - **87** (100)
Flaps - Up

CLIMB

100 (115)
Throttle - 24" MP
Prop - 2400 RPM
Mixture - As Req.
Fuel Pump - Off
Instruments
Taxi / Land Light - Off
Flight Plan - Open

CRUISE

Throttle
Prop
Mixture
Instruments
Fuel - Proper Tank
*Fuel Pump On
While Switching Then
Off After 10 Seconds*

DESCENT

Throttle - MP As Req.
Mixture - Richen
Carb Heat - As Req.
Fuel - Proper Tank
ATIS / AWOS
Altimeter
Instruments

PRE-LANDING

Brakes - Pedal Test
Landing Light - On
Autopilot - Off
AC - Off
Seat Belts / Harness
Mixture - Best Power
Carb Heat - As Req.
Fuel Pump - On
Fuel - Proper Tank
Flaps - As Req.

LANDING

Flaps - 40° *Or As Req.*
Prop - High RPM
* **70** (80)

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

SECURING

ELT - Verify Silent
Avionics - Off
AC - Off
Mixture - Full Lean
Mags - Off
Master - Off
Lights - Off
Hobbs / Tach Time
Secure Yoke
Chocks
Tie Downs
Pitot Cover
Baggage Door
Cabin Door

Close Flight Plan

* **Adjust Speed
As Needed For
Conditions.**
*Check Your POH
For Notes / Cautions
Plus Manufacturer
For Revisions.*

Vr • Rotation -	52 (60)	Vs ₀ • Stall With Flaps -	52 (60)	Va • Max Abrupt (2400 lbs) -	109 (125)	Vne • Never Exceed -	171 (197)
Vx • Best Angle Climb -	78 (90)	Vs • Stall w/o Flaps -	61 (70)	Va • Max Abrupt (Full Gross) -	120 (138)	Vfe • Flaps Extended -	100 (115)
Vy • Best Rate Climb -	87 (100)	Best Glide (2400 lbs) -	75 (86)	Vno • Max Structural Cruise -	136 (156)	X Wind • Max Demo'd -	17 (20)
		Best Glide (Full Gross) -	83 (95)				

	KNOTS (MPH)	FLAPS °	- NOTES -
DEPARTURE			
Rotation *	52 (60)	0	⁽¹⁾ Hot Start: Same Except Mixture Lean. When Engine Fires, Advance Mixture And Position Throttle As Desired. Short Field 25° Flaps Soft Field 25° Flaps
Best Angle Climb	78 (90)	0	
Best Rate Climb	87 (100)	0	
CRUISE TAS-5,000'			
Economy	117 (135)	0	18.3" MP - 2200 RPM - 10.3 GPH - 55% <i>Fixed Prop - 2305 RPM</i>
Normal	126 (145)	0	20.2" MP - 2300 RPM - 11.5 GPH - 65% <i>Fixed Prop - 2450 RPM</i>
Maximum	133 (153)	0	21.6" MP - 2400 RPM - 14.0 GPH - 75% <i>Fixed Prop - 2570 RPM</i>
ARRIVAL			
Approach	78 (90)	10-25	17" MP (Initially) <i>Fixed Prop - 1600 RPM</i>
Short Final *	70 (80)	40	Prop - High 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 manufacturer 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 consents 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 8.0
CheckMate Aviation Inc. 800-359-3741 1992-2019

(IF UNABLE TO ABORT TAKEOFF)

POWER LOSS IMMEDIATELY AFTER TAKEOFF / NO RESTART

MAINTAIN AIRCRAFT CONTROL

BEST GLIDE - 83 KIAS (95 MPH)

Full Gross Weight

FUEL PUMP - OFF

FUEL SELECTOR - OFF

MIXTURE - FULL LEAN / IDLE CUTOFF

FLAPS - DOWN

MASTER & MAGS - OFF

UNLATCH DOOR
PROTECT BODY

POWER LOSS IN FLIGHT

BEST GLIDE - 83 KIAS (95 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

Note Gauges

FUEL PUMP - ON

FUEL PRIMER - LOCKED

Try Re-Priming

MAGNETOS - CHECK ALL

MASTER - ON

IF NO RESTART & TIME PERMITS

MAINTAIN BEST GLIDE

PROP - LOW RPM

Full Aft

SQUAWK 7700

DECLARE EMERGENCY

TWR, APP, Unicom, 121.5

ELT - ON

FUEL PUMP - OFF

MIXTURE - FULL LEAN / IDLE CUTOFF

FUEL SELECTOR - OFF
SEATBELTS / HARNESS

FLAPS - AS NEEDED

Full Flaps When Field Assured

MASTER & MAGS - OFF

UNLATCH DOOR

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 ELECTRICAL DEVICE AT A TIME

RESET CIRCUIT BREAKERS ONLY IF CRITICAL

ENGINE FIRE IN FLIGHT

MIXTURE - FULL LEAN / IDLE CUTOFF

FUEL SELECTOR - OFF

MASTER - OFF

CABIN HEAT & AIR - OFF

INCREASE AIRSPEED TO EXTINGUISH - LAND ASAP

Mags - On

Vents - Open

ENGINE FIRE DURING START

CONTINUE CRANKING ENGINE

IF START - RUN A FEW SECONDS - SHUTDOWN - INSPECT

IF NO START - MIXTURE - IDLE CUTOFF & FUEL SELECTOR - OFF

THROTTLE - FULL OPEN - CRANK ENGINE FEW SECONDS

MASTER & MAGS - OFF

EVACUATE / FIRE EXTINGUISHER

ICING

PITOT HEAT - ON

CARB HEAT - ON OR AS REQUIRED

DEICING EQUIPMENT - ON

CABIN HEAT & DEFROST - MAXIMUM

STRONGLY CONSIDER 180° TURN

ATTAIN HIGHER OR LOWER ALTITUDE

INCREASE ENGINE & PROP SPEED

FLAPS - NOT RECOMMENDED FOR LANDING

LAND FASTER AS NEEDED

OTHER

ALTERNATOR FAILURE: Reduce Electrical Load / Verify C.B. In. Attempt To Reset Overvoltage Relay - Turn ALT Switch Off For One Second, Then On.

If Ammeter Continues To Indicate Zero Output, Or If Alternator Will not Remain Reset, Turn Off ALT Switch, Maintain Minimum Electrical Load And Land ASAP. (BATTERY ONLY)

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.: 122.000-122.675. 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
Piper Cherokee 235E PA-28-235, (Lycoming O540-B, 235HP)

* Empty Weight: LBS (Specific Plane Weight)
* Max. Useful Load: LBS (Including Fuel @ 6 lbs/gal)
Max. Baggage Areas: 200 LBS
Max. T.O. Weight: 2900 LBS

Fuel Type: 100 LL (Blue) / 100 (Green) / 80 / 87
Usable Fuel: 83.5 Gallons (Main & Auxiliary)
Oil Capacity: 12 Quarts (Minimum 8)
Electrical: 12-14 VOLT / 60 AMP
Tire Pressure: Nose - 29 PSI / Main - 36 PSI