

INITIAL

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

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 Time
Fuel - Proper Tank
Circuit Breakers
Alternate Static
Pitot / Static - Drain/
Close
ELT - Armed

START

Seat Track/Back - Lock
Avionics - Off
Autopilot - Off
Prop - High RPM
Throttle - Slight
Brakes
Prop - Clear
Master - On
Fuel Pump - On
Mixture - Rich/Prime
Mixture - Lean
Mags - Start
Mixture - Full Rich
Oil Pressure
Fuel Pump - Off
Fuel Pressure
Lights - As Req.
Mixture - As Req.

PRE-TAXI / TAXI

Seat Belts / Harness
Flaps - Up
Heat / Vent / Defrost
Avionics - On
ATIS / AWOS
Altimeter
XPDR - Alt + Sqwk
ADS-B - On
Radio - Test
Landing 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
Alter. Air - Test/Close
Mixture - Best Power
2300 RPM
Mags - Test **R-L-Both**
Prop - Cycle
Vacuum
Amps / Volts
Fuel Pressure
Oil Pressure
Oil Temperature
Idle - Check Closed
Friction Lock

PRE-TAKEOFF

Flaps - 0° - 25°
Prop - High RPM
Mixture - Best Power
Fuel Pump - On
Gear Override - As Req.
Pitot Heat - As Req.
XPDR - Alt + Sqwk
Heading Bug
Doors / Windows
Landing Light - On
Anti-Collision - On
Time - Note
Brakes - Release

ABORT PLAN - READY!

TAKEOFF

Full Throttle
2700 RPM **Max**
Manifold Pressure
Oil Pressure
Rotate - * **56 (65)**
Vy - **83 (100)**
Gear - Up
Flaps - Up

CLIMB

96 (110)
Throttle - 25" MP
Prop - 2500 RPM
Mixture - As Req.
Fuel Pump - Off
Instruments
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
Fuel - Proper Tank
ATIS / AWOS
Altimeter
Instruments

PRE-LANDING

Brakes - Pedal Test
Landing Light - On
Autopilot - Off
Seat Belts / Harness
Mixture - Best Power
Fuel Pump - On
Fuel - Proper Tank
Gear Override - As Req.
Gear Lights - **Green**
Flaps - As Req.

LANDING

Gear Lights - **Green**
Flaps - 40° *Or As Req*
Prop - High RPM
* **68 (78)**

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

GO-AROUND

Power - Full
Flaps - Approach
Gear Override - As Req.
Positive Rate Climb
Gear - Up
Flaps - Up

AFTER LANDING

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

SECURING

ELT - Verify Silent
Avionics - 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 Speed - 56 (65)

Vs₀ • Stall With Flaps - 55 (63)

Va • Max Abrupt (2100 lbs) - 106 (122)

Vfe • Flaps Extended - 109 (125)

Vx • Best Angle Climb - 78 (90)

Vs • Stall w/o Flaps - 60 (69)

Va • Max Abrupt (Full Gross) - 116 (134)

Vlo/Vle • Gear Speeds - 130 (150)

Vy • Best Rate Climb - 87 (100)

Vno • Max Struct. Cruise - 148 (170)

Vne • Never Exceed - 186 (214)

Vlr • Max Gear Retract - 109 (125)

KNOTS (MPH)

FLAPS °

- NOTES -

DEPARTURE

Rotation *
Best Angle Climb
Best Rate Climb

56 (65)
78 (91)
87 (100)

0
0
0

Vx & Vy Are **Gear Up Speeds.****Short Field:** 25° Flaps. Flaps Up When Clear.**Soft Field:** 25° Flaps. Rotate As Soon As Possible.

CRUISE TAS-6,000'

Economy
Normal
Maximum

115 (132)
128 (147)
137 (158)

0
0
0

19.4" MP - 2100 RPM - 7.27 GPH - 55%
21.3" MP - 2300 RPM - 8.48 GPH - 65%
23.3" MP - 2400 RPM - 9.42 GPH - 75%

ARRIVAL

Approach
Short Final *

78 (90)
68 (78)

10-25
40

17" MP (Initially)
Prop - High RPM

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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", New Engine. () = MPH.

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

~ IMPORTANT... FREQUENTLY CHECK OUR WEBSITE & MANUFACTURER FOR UPDATES ~ COMPLETE CUSTOMIZATION AVAILABLE INCLUDING SIZES & FORMATS ~ PLEASE DO NOT COPY ~

(IF UNABLE TO ABORT TAKEOFF)

POWER LOSS IMMEDIATELY AFTER TAKEOFF / NO RESTART

MAINTAIN AIRCRAFT CONTROL

FUEL SELECTOR – OFF
MIXTURE – FULL LEAN / IDLE CUTOFF
FLAPS – DOWN
GEAR – AS REQUIRED
MASTER & MAGS – OFF

UNLATCH DOOR
PROTECT BODY

POWER LOSS IN FLIGHT

MAINTAIN SAFE AIRSPEED
If Needed Manual Override Gear Engaged Above 96 KIAS (110 MPH)
NOTE WIND DIRECTION & VELOCITY
PICK LANDING SITE
MIXTURE – FULL RICH
FUEL SELECTOR – CHECK / SWITCH *Note Gauges*
FUEL PUMP – ON
ALTERNATE AIR – ON
MAGNETOS – CHECK ALL
MASTER – ON

IF NO RESTART & TIME PERMITS

MAINTAIN SAFE AIRSPEED
PROP – LOW RPM *Full Aft*
SQUAWK 7700
DECLARE EMERGENCY *WR, APP, Unicom, 121.5*
ELT – ON
MIXTURE – FULL LEAN / IDLE CUTOFF
FUEL SELECTOR – OFF
SEATBELTS / HARNESS
FLAPS – AS NEEDED *Full Flaps When Field Assured*
GEAR-DOWN *Up If Very Rough/Soft Terrain & Engage Gear Override*
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 BREAKER(S) ONLY IF CRITICAL

ENGINE FIRE IN FLIGHT

THROTTLE – CLOSED
MIXTURE – FULL LEAN / IDLE CUTOFF
FUEL SELECTOR – OFF
MASTER – OFF
CABIN HEAT & AIR – OFF *Vents – Open*
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 / CRANK ENGINE FEW SECONDS
MASTER & MAGS – OFF / EVACUATE / FIRE EXTINGUISHER

ICING

PITOT HEAT – 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 REQUIRED

MANUAL GEAR EXTENSION

REDUCE AIRSPEED BELOW 87 KIAS (100 MPH)
LANDING GEAR LEVER – DOWN
IF GEAR FAILED TO LOCK DOWN – SELECT OVERRIDE UP
EMERGENCY GEAR LEVER - EMERGENCY DOWN
YAW AIRPLANE IF NECESSARY TO HELP LOWER GEAR
VERIFY – 3 GREEN LIGHTS

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 Arrow 180 PA-28R-180, Lycoming: IO-360-B1E

* Empty Weight: LBS *(Specific Plane Weight)*
* Max. Useful Load: LBS *(Including Fuel @ 6 lbs/gal)*
Max. Baggage Area: 200 LBS *(Included In Useful Load)*
Max. T.O. Weight: 2500 LBS

Fuel Type: 100 / 130
Total Fuel: 50 Gallons
Oil Capacity: 8 Quarts *(POH-Minimum 2. Suggest 6)*
Electrical: 12 VOLT / 60 AMP
Tire Pressure: Nose - 30 PSI / Main - 27 PSI