



N57355

PA28R-200 Arrow II

ATIS 126.9 Ground 118.22 Tower 119.2 (125.7 28R) Air-to-Air 122.75
KMYF: TPA 1,400' | Elev. 427' Crown Air 123.5

PREFLIGHT (REFER TO POH)

Lights / Stall Light.....CHECK
Oil.....Min. 5 qts, Check Quality
FuelQuantity/Quality
A.R.O.W, all caps, drains, vents, belt, prop,
intakes, antennas, pitot & static ports, gear,
tires, brakes, surfaces & controls.....CHECK

ENGINE START

Cold / Hot / Flooded? Refer to POH

Chocks, tie-downs, baggage doorCHECK
Flaps.....Verify RETRACTED
Seat Belts/HarnessesON
Passenger Brief.....COMPLETE
Alternate AirOFF
Fuel SelectorFULLEST TANK
PropellerMAX RPM
Gear SelectorDOWN
Throttle.....OPEN 1/2 in.
Master Switch.....ON
Circuit BreakersCHECK
Beacon (Fin).....ON
Fuel Pump.....ON
MixtureFULL RICH
(until fuel flow then cut-off)
Fuel Pump.....OFF
Propeller Area.....“CLEAR”
BrakesHOLD
Magnetos.....START (then BOTH)
MixtureRICH upon start
Throttle.....Below 1,000 RPM
Oil Pressure.....CHECK
Fuel PressureCHECK
MixtureLEAN FOR TAXI

BEFORE TAXI

Avionics.....ON
TransponderALT / SET
Nav Lights/ADS-B.....ON
Garmin 430WCHECKS
ATIS.....COPIED

AltimeterSET
Taxi Brief.....COMPLETE
Brakes.....TEST

RUN-UP

Flight InstrumentsCHECKED/SET
Flight ControlsFREE & CORRECT
Elevator TrimSET for T/O
Mixture.....RICH
Throttle.....2,000 RPM
PropellerCycle Full Range then FWD
(MAX 500 RPM Drop)
Alternate Air.....CHECK then OFF
Magnetos (175/50).....CHECK then BOTH
Vacuum (5.0" Hg. $\pm$ 1)CHECK
AmmeterCHECK
Engine Gauges / Fuel FlowCHECK
Throttle.....1,000 RPM
MixtureLEAN FOR TAXI
Comm/Nav Radios.....SET
Door/Window.....LATCHED
Takeoff Brief.....COMPLETE
Takeoff Time.....NOTE (Start Fuel Timer)

Runway Items

MixtureRICH (or as required)
Fuel Pump.....ON
Landing Light & Wing StrokesON

TAKEOFF (NORMAL)

Engine Gauges“GREEN”
Airspeed“ALIVE”
Rotate.....60-65 MPH
Gear.....“+ Rate” / RETRACT
Climb.....100 MPH (Vy) / 85 MPH (Vx)

CLIMB

Power25"/2,500 RPM
Landing LightOFF
Fuel Pump.....OFF (Check Pressure)
Enroute Climb.....110 MPH

CRUISE

Throttle 23"/2,350 RPM (or per POH)
Mixture LEAN (EGT Approx. 1,400°)
(CHT < 450°)
Fuel MANAGE
Switch tanks every 30 minutes with
fuel pump ON, and check pressure
H.I..... Set to Compass (Every 15 min)

DESCENT & LANDING

Landing Brief COMPLETE
Landing Light ON
Fuel Selector FULLEST TANK
Altimeter SET

GUMPS (Entering Pattern)

Gas (Fuel Selector) As Required
Undercarriage DOWN / 3 GREEN
(Below 150 MPH)
Mixture As Required
Propeller FORWARD
(Short final for noise abatement)
Switches (FP, Lights) ON
Seatbelts/Harnesses ON
Approach ... 90 MPH / 80 MPH (Short Fld)
Final Checks **GUMPS**

AFTER LANDING

Trim NEUTRAL
Flaps RETRACT
Mixture LEAN FOR TAXI
Fuel Pump OFF
Landing Light OFF (or as required)
Wing Strobes OFF
Transponder 1200 (or as required)

SHUTDOWN

Avionics Master OFF
Throttle 1,000 RPM
Mixture CUT-OFF
Magnetos OFF
Master Switch OFF
Lights OFF
Control Lock INSTALL

Seats fully back, seat belts latched

All trash removed

Chains, chocks, cover, keys, checklists

LIMITATIONS & INFORMATION

Vso 64 (MPH IAS)
Vs 71
Vx (Gear Down) 85
Vx (Gear Up) 96
Vy 100
Vfe 125
Vle 150
Vlo (Extend) 150
Vlo (Retract) 125
Vno 170
Vne 214
Va 131 (2650 lbs)
Approach 65-70
Best Glide 105
Demonstrated Crosswind 20

Weights

Max Gross Weight 2,650 lbs
Empty Weight (N57355) 1739.0
Useful Load 911
Max Weight Baggage 200

General Info

Fuel Capacity 48 gal (Usable)
Oil Capacity Max 8 qts, Min 2 qts
Oil Level LTFSD > 5 qts
Oil Type Phillips 100AW
or Aeroshell W100
Tire Pressure Nose: 30 PSI, Mains: 27 PSI
Hydraulic Brake Fluid MIL-H-5606
Electrical System 12V Battery
14V, 60A Alternator

Engine Lycoming IO-360-C1C
Horsepower 200 HP @ 2700 RPM
Positive Load 3.8G
Negative Load **NOT APPROVED**

NO TOUCH & GOS ALLOWED

Full stop taxi backs only!

EMERGENCIES

PIPER ARROW II

ENGINE FAILURE

Fly the plane!

- Airspeed 105 MPH
- Best Field Turn Toward
- Checks:
- Fuel Pump ON
- Mixture..... RICH (or as required)
- Alternate Air..... ON
- MagnetosBOTH (or best)
- Fuel Selector.....SWITCH TANKS
- Throttle & Mixture VARIOUS SETTINGS

Declare121.5 / 7700

- Execute Landing (When no other options):
- Mixture..... CUT-OFF
 - MagnetosOFF
 - Fuel Selector.....OFF
 - Avionics Master.....OFF
 - Battery MasterOFF
 - Door CRACKED
 - Seat Belts..... TIGHT

ENGINE ROUGHNESS

- Fuel Pump ON
- Mixture..... RICH (or as required)
- Alternate Air..... ON
- Primer..... IN & LOCKED
- MagnetosBOTH (or best)
- Fuel Selector.....SWITCH TANKS
- Divert..... As Necessary

ENGINE FIRE

- Fuel Selector.....OFF
 - Throttle CLOSED
 - Mixture..... CUT-OFF
 - Fuel PumpOFF
 - Heater & Defroster.....OFF
 - Airspeed Increase if fire not out
then 105 MPH
- Proceed with power off landing

ELECTRICAL FIRE

- Battery MasterOFF
 - Fresh Air Vents OPEN
 - Cabin Heat.....OFF
- Land as soon as practicable

ALTERNATOR FAILURE

- Failure.....VERIFY
- Electrical LoadREDUCE
- Alternator Circuit Breakers..... CHECK
- Alt Switch.....OFF (for 1 second),
then ON

If no output:

- Alt Switch.....OFF

Reduce electrical load and land as soon as practical.

EMERGENCY GEAR EXTENSION

- Master Switch..... CHECK
- Circuit Breakers CHECK
- Panel Lights OFF (Daytime)
- Gear Indicator Bulbs CHECK

If gear not down and locked:

- Airspeed Below 100 MPH
- Gear Selector DOWN POSITION
- Auto-Extend Override ENGAGE
- Auto-Extend Override .. EMERGENCY DOWN (hold)

If gear is still not down & locked, yaw abruptly from side to side with rudder.

PROPELLER OVERSPEED

- Throttle..... RETARD
 - Oil Pressure CHECK
 - PropellerFULL DECREASE
- Then set if any control available
- AirspeedREDUCE
 - Throttle..... As Required
(to remain below 2,700 RPM)

LOSS OF OIL PRESSURE

Land as soon as possible. Prepare for power off landing. No unnecessary power changes

HIGH OIL TEMPERATURE

Land at nearest airport and investigate the problem. Prepare for power off landing.

LOSS OF FUEL PRESSURE

- Electric Fuel Pump..... ON
- Mixture..... FORWARD
- Fuel SelectorFULLEST TANK

OPEN DOOR

- Slow 100 MPH
- Cabin VentsCLOSE
- Storm Window OPEN
- Upper Latch LATCH
- Slip..... In Direction of Open Door
(If needed)

MANEUVERS

PIPER ARROW II

- C – Clearing turns/Calls (Air-to-Air)
- H – Heading (Reference point)
- A – Altitude (Minimum 1,500')
- P – Place to Land
- S – Stabilized

SLOW FLIGHT

- Throttle..... 15" MP
- GearExtend (Below 150 MPH)
- Flaps.....Extend (Below 125 MPH)
- Prop Full Forward
- Airspeed..... Above 1st Stall Indication
- Maintain Heading & Altitude
- Pitch for airspeed, power for altitude

Recovery

“Flaps, gear, flaps, flaps”

- Throttle.....Full
- Flaps.....25°
- Airspeed..... > 85 MPH
- Gear Retract (< 125 MPH)
- Flaps..... Retract in increments
- Return to level cruise

POWER OFF STALL

- Throttle..... 15" MP
- GearExtend (Below 150 MPH)
- Flaps.....Extend (Below 125 MPH)
- Prop Full Forward
- Maintain Heading & Altitude
- Descend 500 FPM

Recovery

“Flaps, gear, flaps, flaps”

- Aviate..... Pitch Down (Relax Pressure)
THEN Level Wings
- Throttle.....FULL
- Flaps.....25°
- VSI.....+ Rate at 85 MPH (Vx)
- Gear Retract (< 125 MPH)
- Airspeed..... 100 (Vy)
- Flaps..... Retract in increments
- Return to level cruise
- *Perform in various configurations of flaps, descending (as if to land), and descending turns (turning base to final)

NO TOUCH & GOS ALLOWED

POWER ON STALL

- Throttle..... 15" MP
- GearExtend (Below 150 MPH)
- FlapsRetracted
- Prop Full Forward
- Maintain Heading & Altitude
- Slow 85 MPH (Vx)
- Throttle..... Full
- Pitch..... UP (for excessive AOA)
- Rudder Coordinate

Recovery

- Aviate Pitch Down (Relax Pressure)
THEN Level Wings
- Throttle..... Maintain Full
- VSI..... + Rate at 85 MPH (Vx)
- Gear Retract (Before 125 MPH)
- Airspeed ..Accelerating to 100 MPH (Vy)
- Flaps Retract in increments (If Used)
- Return to level cruise
- *Perform in various configurations of flaps (going around) and turns (turning crosswind)

STEEP TURNS

- Throttle..... 18" MPH
- Prop 2,500 RPM
- Airspeed 120 MPH (or below Va)
- Pick visual reference point
- Note heading & altitude
- Roll coordinated into bank
- Passing through 30 degrees add 2-3" MP and increase back pressure
- Reduce power and back pressure upon rollout
- Rudder in the direction of the roll

GO-AROUND (REJECTED LANDING)

- Throttle.....FULL
- Flaps 25°
- Pitch..... LEVEL, and then Vx or Vy
- Gear “+ Rate” / Retract
- Side step As Necessary
- Communicate As Necessary
- Flaps Retract in increments

DIVERSION

Circle and locate position if lost
Estimate magnetic heading
Turn to heading (Note airspace & terrain)
Check heading indicator to compass
Note Time
Pick appropriate VFR altitude
Measure distance
Compute ETA & fuel burn

EMERGENCY DESCENT

Throttle Idle "CHOP"
Prop Full Forward "PROP"
Gear Extend (Below 150 MPH) "DROP"
Pitch Down
Bank Left 30°
Airspeed 145-150 (Vle)
Recover approximately 200 feet prior to level off altitude (10% descent rate)
DO NOT exceed 125 MPH before gear is retracted

GROUND REFERENCE

Reference(s) Choose as appropriate
Setup Upwind of reference(s)
Altitude Approx. 1,000' AGL*
Throttle Set 2,200 RPM
Trim Set
Entry Heading Downwind
 Higher GS = Steeper Bank
 Lower GS = Shallower Bank
Exit Downwind
*Due to congestion/noise abatement 1,200' AGL is acceptable.

FORWARD SLIP

Flaps As Required
Gear Extend (Below 150 MPH)
Throttle Idle
Ailerons Into Wind
Rudder Opposite Aileron
Pitch 90 MPH (or faster for more slip)
*Airspeed indicator will be inaccurate

SHORT FIELD TAKEOFF

Flaps 25°
Line Up All available runway
Brakes Hold
Throttle Full
Gauges "Green"

Brakes Release
Airspeed "Alive"
Rotate 60-65 MPH
Accelerate to 85 MPH (Vx)
Obstacle "Clear"
Gear Retract
Flaps Retract in Increments
Accelerate to 100 MPH (Vy)

SOFT FIELD TAKEOFF

Flaps 25°
Yoke Full Back
Brakes Avoid Use
Throttle Full
Gauges Green
Airspeed "Alive"

As nose rises, release back pressure to maintain nose high attitude

As aircraft lifts off, pitch forward to remain in ground effect

Accelerate to 85 MPH (Vx)
Begin climb out of ground effect
Gear "+ Rate" / Retract
Flaps Retract in Increments
Accelerate to 100 MPH (Vy)

SHORT FIELD LANDING

Same as normal landing until final.
Adjust aiming point based on wind
Flaps 40°
Airspeed 80 MPH
Throttle Idle
Touchdown
Aerodynamic Braking Aft Yoke
Flaps Retract (if necessary)
Brakes SIMULATED MAXIMUM

SOFT FIELD LANDING

Same as normal landing until final.
Flaps 40°
Airspeed 90 MPH
Throttle Idle
Throttle Add 1-2" MP
Touchdown Softly
Yoke Back (until off runway)

MANEUVERS

COMMERCIAL / CFI

CHANDELLES

Reference Point Choose 90°
Throttle 18" MP
Prop Full Forward
Airspeed..... Below Va
Bank 30°
Throttle FULL
1st 90° Constant Bank / Increasing Pitch
2nd 90° ... Constant Pitch / Decreasing Bank
Rudder Remain Coordinated
At 180° Just above stall, wings level
Return to level cruise

LAZY EIGHTS

Reference Points..... Choose
Throttle 18" MP
Prop 2,300 RPM
Airspeed..... Va (or below 131 MPH)
Rudder Remain Coordinated

STEEP SPIRAL

Altitude sufficient for 3 full spirals and remain > 1,500'
Reference Point Choose
Throttle Idle
Airspeed..... 115 MPH (Vglide + 10)
Bank Maximum 60°
Throttle Clear each turn on upwind

EIGHTS ON PYLONS

Pivotal Altitude ... GS (MPH) squared ÷ 15
Approx. 800 - 900 AGL
Reference Points..... Choose 2
Throttle 18" MP
Prop 2,300 RPM
Airspeed..... Va (or below 131 MPH)
Rudder Remain coordinated
Bank 30° - 40°
Approx. 5-7 seconds between each pylon

ACCELERATED STALLS

Altitude > 3,000' AGL
Airspeed < Va
Roll into 45 bank
Throttle..... Reduce
Pitch..... Firmly pull back to induce stall indication

Recovery

Pitch..... Reduce AOA
Bank..... Level (Coordinated)
Throttle..... Increase as necessary
Return to level flight

POWER-OFF 180° APPROACH

From traffic pattern altitude downwind, when abeam landing runway numbers:

Throttle..... Idle
Flaps Delay extension until landing assured*

*Typically no sooner than base leg

Base Leg..... Turn Early
Glidepath..... Stay slightly high
If short/low..... Fly direct to the numbers
Delay extending flaps
If long/high Square base, S-turns
flaps, slip

CROSS CONTROLLED STALL (CFI)

Flaps Up
Throttle..... Idle
Airspeed 105 MPH
Trim Set
Bank..... Simulate turn to final
Rudder Apply in direction of turn
Ailerons Use to hold bank angle
Pitch..... Increase to induce stall
Hold inputs until stall

Recovery

Pitch..... Lower AOA
Rudder Remove excess inputs
Aileron Level wings
Throttle..... Increase as needed

TRIM STALL (CFI)

Flaps..... Extend to 40°
Throttle Idle
Airspeed..... 105 MPH
Trim..... Set for approach attitude
Throttle Increase to full
Nose should pitch up to stall indications

Recovery

Pitch Lower AOA
Rudder Coordinate
Aileron Level wings
Resume normal climb attitude
Trim..... Re-set

SECONDARY STALL (CFI)

Simulate by performing stall, and then try to level off too quickly or not lower nose sufficiently.

Recovery

Pitch Lower AOA
Throttle Remains Full
Ailerons..... Level wings
Rudder Coordinate

SPINS (CFI)

*****NOT APPROVED*****

LOCAL AREA INFO

Montgomery (MYF) ATIS: 126.9 Ground: 118.22 Tower: 119.2 (28L) Tower: 125.7 (28R)	Elev. 427' TPA: 1,400 Runways: 28R/L 10R/L 23/5
Ramona (RNM) ATIS: 132.025 Tower: 119.875 Ground: 121.65	Elev. 1,393' TPA: 2,400 Runways: 27/9
Brown (SDM) ATIS: 132.35 Tower: 128.25 Ground: 124.4	Elev. 526' TPA: 1,500 (26R) 1,100 (26L) Runways: 26R/L 8R/L
Gillespie (SEE) ATIS: 125.45 Tower: 120.7 Tower: 123.8 Ground: 121.7	Elev. 387' TPA*: 1,400 (27L) 1,600 (27R) *Day Runways: 27R/L 9R/L 35/17
Palomar (CRQ) ATIS: 120.15 Tower: 118.6 Ground: 121.8	Elev. 331' TPA: 1,500 Runways: 24 / 6
Oceanside (OKB) ASOS: 127.8 CTAF: 122.72	Elev. 28' TPA: 1,000 Runways: 25 / 7
Fallbrook (L18) AWOS: 118.425 CTAF: 123.05	Elev. 1,350' TPA: 1,700 Runways: 18 / 36
VORs MZB 117.8 OCN 115.3 PGY 116.45 JLI 114.0	