



**ARROW**

**PA-28R-201**

**PILOT'S CHECKLIST**

2024

**ARROW PA28R-201**

**SPEEDS FOR OPERATION**

*Speeds are for maximum weight. To achieve the performance specified for takeoff distance, the speed appropriate to weight must be used.*

**TAKEOFF**

Normal Rotation.....65-75 KIAS  
Normal Climb Out.....90 KIAS (GEAR UP)

**CLIMB**

Best Rate of Climb(Vy).....90 KIAS (GEAR UP)  
Best Angle of Climb (Vx).....78 KIAS (GEAR UP)  
Best Angle of Climb(Vx)...72 KIAS (GEAR DOWN)  
En Route Climb.....104 KIAS GEAR SPEEDS  
Maximum Landing Gear Operating  
Speed.....129 KIAS  
Maximum Landing Gear Retraction  
Speed.....107 KIAS

**MANEUVERING SPEED**

(Max. Rec. Turbulent Air Penetration Speed)  
2750 LBS.....118 KIAS  
1865 LBS.....96 KIAS

**MAXIMUM DEMONSTRATED CROSSWIND**

Takeoff or Landing.....17 KTS

**PREFLIGHT INSPECTION**

**PREPARATION**

Weather.....SUITABLE  
Weight/C.G.....WITHIN LIMITS  
Navigation.....PLANNED  
Charts and Navigation Equipment.....ON BOARD  
Performance and Range.....COMPUTED AND SAFE  
Baggage.....WEIGHED, STOWED & TIED

**COCKPIT**

Aircraft Documents.....ON BOARD & VISIBLE  
Control Wheel.....RELEASE BELTS  
Landing\_Gear Emergency Release.....UP  
Gear Handle.....DOWN  
Parking Brake.....SET  
Radio Master Switch.....OFF  
Electrical Switches (Fans, Pitot Heat, AP/FD, AC, etc.).....OFF  
Ignition Switch.....OFF  
Magnetos.....OFF  
Mixture.....IDLE CUT-OFF  
Master Switch.....ON  
Fuel Quantity Gauges.....CHECK  
Annunciator Panel.....CHECK  
Interior and Exterior Lights.....CHECK  
Stall Warning.....CHECK  
Pitot Heat.....CHECK  
Master Switch.....OFF  
Flight Controls.....FREE & CORRECT  
Flaps.....EXTEND  
Trim.....CHECK, SET NEUTRAL  
Pitot & Static Drain.....DRAIN, CLOSE  
Windows.....CHECK, CLEAN  
Baggage, Empty Seats.....SECURE  
Baggage Door.....CLOSE, SECURE

**RIGHT WING**

Wing Surface.....FREE OF ICE, SNOW, FROST  
Flaps and Ailerons .....CHECK MOVEMENT, SECURITY  
Static Wicks.....CHECK  
Wing Tip and Lights.....CHECK  
Fuel Tank.....CHECK SUPPLY & SECURE CAP  
Fuel Tank Vent.....CLEAR  
Fuel Tank Sump.....DRAIN  
Wing Tie Down and/or Chocks.....REMOVE  
Main Gear Strut.....CHECK (approx. 2 in.)  
Tire.....CHECK  
Brake Block and Discs.....CHECK  
Switches and Gear Well.....CHECK  
Fresh Air Inlet.....CLEAR

## NOSE SECTION

Fuel and Oil.....CHECK FOR LEAKS  
General Condition.....CHECK  
Cowling.....SECURE  
Oil.....CHECK QUANTITY (6 to 8 qts)  
Dipstick.....PROPERLY SEATED  
Oil Filler Inspection Door.....SECURE  
Air Inlets.....CLEAR, REMOVE COVER  
Engine Baffle Seals.....CHECK  
Alternator Belt.....CHECK TENSION  
Windshield.....CLEAN  
Propeller and Spinner.....CHECK  
Landing Light.....CHECK  
Chock.....REMOVE  
Nose Gear Strut.....CHECK (approx. 2.75 in)  
Nose Wheel Tire.....CHECK  
Switches and Gear Well.....CHECK  
Fuel Strainer.....DRAIN

## FUSELAGE

Antenna.....CHECK  
Left Static Vent.....CLEAR  
Fresh Air Inlet.....CLEAR  
Empennage.....FREE OF ICE, FROST  
Stabilator.....CHECK FOR INTERFERENCE  
Tail Tie Down.....DISCONNECT  
Right Static Vent.....CLEAR  
Final Walk Around.....COMPLETE  
Baggage Door.....SECURE

## LEFT WING

Wing.....FREE OF ICE, SNOW, FROST  
Fresh Air Inlet.....CLEAR  
Main Gear Strut.....CHECK (approx. 2 in.)  
Tire.....CHECK  
Brake Block and Discs.....CHECK  
Switches and Gear Well.....CHECK  
Fuel Tank.....CHECK SUPPLY & SECURE CAP  
Fuel Tank Sump.....DRAIN  
Fuel Vent.....CLEAR  
Wing Tie Down and/or Chocks.....REMOVE  
Pitot Mast.....REMOVE COVER, HOLES CLEAR  
Stall Warning Vane.....CHECK  
Wing Tip and Lights.....CHECK  
Aileron and Flaps .....CHECK MOVEMENT,  
SECURITY  
Static Wicks.....CHECK

**BEFORE STARTING ENGINE**

Preflight Inspection.....COMPLETE  
Seat Belts and Harnesses.....FASTEN, CHECK  
Brakes.....SET  
Circuit Breakers.....IN  
Alternate Air.....OFF  
Propeller.....FULL FORWARD  
Radio Master Switch.....OFF  
Fuel Selector .....DESIRED TANK  
Passenger Briefing.....COMPLETE

**NORMAL START – COLD ENGINE**

Throttle.....1/2" OPEN  
ALTR Switch.....ON  
BATT MASTER Switch.....ON  
Electric Fuel Pump.....ON  
Strobes (Fin Strobes if equipped).....ON  
Mixture.....RICH, THEN IDLE CUTOFF  
Propeller Area.....CLEAR  
Starter.....ENGAGE  
Mixture.....ADVANCE  
Throttle.....ADJUST TO 1000  
Oil Pressure.....CHECK  
Ammeter.....CHECK

**NORMAL START – HOT ENGINE**

Throttle.....1/2" OPEN  
ALTR Switch.....ON  
BATT MASTER Switch.....ON  
Electric Fuel Pump.....ON  
Strobes (Fin Strobes if equipped).....ON  
Mixture.....IDLE CUT-OFF  
Propeller Area.....CLEAR  
Starter.....ENGAGE  
Mixture.....ADVANCE  
Throttle.....ADJUST TO 1000 RPM  
Oil Pressure.....CHECK  
Ammeter.....CHECK

**STARTING ENGINE WHEN FLOODED**

Throttle.....OPEN FULL  
ALTR Switch.....ON  
BATT MASTER Switch.....ON  
Electric Fuel Pump.....OFF  
Strobes (Fin Strobes if equipped).....ON  
Mixture.....IDLE CUT-OFF  
Propeller Area.....CLEAR  
Starter.....ENGAGE  
Mixture.....ADVANCE  
Throttle.....REDUCE TO 1000 RPM  
Oil Pressure.....CHECK  
Ammeter.....CHECK

**ENGINE START WITH EXTERNAL POWER**

REFER TO POH

**ENGINE FIRE DURING START**

Starter.....CRANK ENGINE  
Mixture.....IDLE CUT-OFF  
Throttle.....OPEN  
Electric Fuel Pump.....OFF  
Fuel Selector .....OFF

**ABANDON IF FIRE CONTINUES**

**AFTER STARTING ENGINE**

Throttle.....1000 to 1200 RPM  
Radio Master Switch.....ON  
Strobes.....(FIN if equipped).....OFF  
Electric Fuel Pump.....OFF  
Mixture.....FULL RICH BELOW 5000ft.  
Flaps.....UP  
Engine Gauges.....CHECK  
Flight Instruments.....SET  
Radios.....SET AND TEST  
Transponder.....GROUND  
Fuel Selector .....SWITCH TANK  
Dispatch.....RAMP OUT

**TAXI**

Taxi Area.....CLEAR  
Parking Brake.....RELEASE  
Propeller.....FULL FORWARD  
Throttle.....APPLY SLOWLY  
Brakes.....CHECK  
Steering.....CHECK  
Flight Instruments.....CHECK

## RUN UP

Parking Brake.....HOLD AND SET  
Propeller.....FULL INCREASE  
Mixture.....FULL RICH  
Throttle.....2000 RPM  
Magnetos.....CHECK  
(Max Drop 175 RPM...Max Diff. 50 RPM between each)  
Oil Temperature.....CHECK  
Oil Pressure.....CHECK  
Fuel Pressure.....CHECK  
Ammeter.....CHECK  
Annunciator Panel.....PRESS TO TEST  
Propeller.....EXERCISE, THEN FULL FORWARD  
Propeller.....GOVERNOR CHECK  
Alternate Air.....CHECK  
*Engine is warm for takeoff when throttle can be opened without engine faltering.*  
Throttle.....IDLE CHECK  
(500-600 RPM) Throttle..... 1000 RPM

## BEFORE TAKEOFF

BATT MASTER Switch.....ON  
ALTR Switch.....ON  
Flight Instruments.....CHECK  
Fuel Selector.....PROPER TANK  
Electric Fuel Pump.....ON  
Engine Gauges.....CHECK  
Alternate Air.....CLOSED  
Mixture.....SET  
Propeller.....FULL INCREASE  
Belts/Harnesses.....FASTENED/CHECK  
Seat Backs.....ERECT  
Flaps.....SET  
Trim.....SET  
Emergency Gear Extension lever.....UP  
Controls.....FREE AND CORRECT  
Crew Takeoff Briefing.....COMPLETE  
Transponder.....CHECK  
Landing Light.....ON  
Strobes (Wing tip).....ON  
Cabin Door and Window.....LATCHED

## ENGINE POWER LOSS DURING TAKE OFF

*If sufficient runway remains for a normal landing, leave gear down and land straight ahead.*

**If area is rough, or it is necessary to clear obstructions:**

Gear Selector Switch.....UP

**If sufficient altitude has been gained to attempt a restart:**

Maintain safe air speed .....79 KIAS

Fuel Selector.....SWITCH

Elector Fuel pump.....CHECK ON

Mixture.....CHECK RICH

Alternate Air.....OPEN

**IF POWER IS NOT REGAINED, PROCEED WITH POWER OFF LANDING**

## NORMAL TAKEOFF

Flaps.....UP  
Throttle.....FULL  
Rotate .....65-75 KIAS  
After a positive rate of climb is achieved and no runway is remaining to land on safely .....GEAR UP  
Climb Speed.....90 KIAS

## SHORT FIELD TAKEOFF 25° FLAPS

Flaps.....25°  
Brakes.....HOLD  
Throttle.....FULL INCREASE  
Engine Gauges.....CHECK  
Brakes.....RELEASE  
Rotate.....60 KIAS  
*After breaking ground, accelerate to 72KIAS Gear down Vx and climb past the obstacle.*  
After positive rate of Climb.....GEAR UP  
Accelerate to Gear up Vx.....78 KIAS  
Flaps.....SLOWLY RETRACT  
Accelerate to Gear up Vy.....90 KIAS

## SOFT FIELD TAKEOFF 25° FLAPS

Flaps.....25°  
Control Wheel.....TAIL LOW ATTITUDE  
After breaking ground, accelerate in ground effect to the best gear down angle of climb speed 72 KIAS.  
Clear any obstacles.  
After positive rate of Climb.....GEAR UP  
Accelerate to Gear up Vx.....78 KIAS  
Flaps.....SLOWLY RETRACT  
Accelerate to Gear up Vy.....90 KIAS

### ENROUTE CLIMB (at 1000 AGL)

Airspeed.....104 KIAS  
Throttle.....25"  
Propeller.....2500 RPM  
Landing Light.....OFF  
Flaps.....0°

### ENGINE POWER LOSS DURING FLIGHT

#### **If at low altitude:**

Maintain safe air speed .....79 KIAS

#### **PREPARE FOR POWER OFF LANDING.**

#### ***If altitude permits:***

Fuel Selector.....SWITCH  
to tank containing fuel  
Elector Fuel pump..... ON  
Mixture.....RICH  
Alternate Air.....OPEN  
Engine Gauges.....CHECK  
for cause of power loss.

*If no fuel flow/pressure is indicated, check tank selector position to be sure it is on a tank containing fuel.*

#### **If power is not restored:**

#### **PREPARE FOR POWER OFF LANDING.**

Trim for 79 KIAS

### CRUISE

Power.....SET  
Mixture.....FULL RICH BELOW 5000ft.  
Trim.....SET  
Electric Fuel Pump.....OFF  
Engine Gauges.....CHECK

### APPROACH

ATIS/AWOS.....CHECK  
Altimeter.....SET  
Nav Instruments..... SET  
Stations.....IDENTIFY  
HSI.....SET  
Mode.....VLOC or GPS  
Comm Radios.....SET  
Approach Briefing.....COMPLETE  
Before Landing Checklist.....COMPLETE  
Backup Nav & Radios.....AS DESIRED

### DESCENT

Propeller.....AS REQUIRED  
Throttle.....AS REQUIRED  
Airspeed.....AS REQUIRED  
Mixture.....ENRICH, as needed

### BEFORE LANDING

Fuel Selector.....PROPER TANK  
Seat Backs.....ERECT  
Belts/Harnesses.....FASTEN/CHECK  
Electric Fuel Pump.....ON  
Mixture.....RICH  
Propeller.....FULL INCREASE  
Gear.....DOWN – 129 KIAS MAX  
Flaps.....SET – 103 KIAS MAX  
Landing Light.....ON  
Trim.....75 KIAS ON FINAL

### GO AROUND

Propeller.....FULL FORWARD  
Throttle.....FULL POWER  
Flaps.....RETRACT TO 25°  
Airspeed.....78 KIAS  
After Positive Rate of Climb.....GEAR UP  
Flaps.....SLOWLY RETRACT

### AFTER LANDING

Flaps.....0°  
Strobe lights.....FIN STROBES  
Landing/Recog lights.....OFF (Except at Night)  
Electric Fuel Pump.....OFF  
Transponder.....GROUND  
Mixture.....FULL RICH BELOW 5000ft.  
Elevator Trim.....NEUTRAL  
Ailerons.....SET TO WIND CONDITIONS

### SECURING AIRCRAFT

Radio Master Switch.....OFF  
Electrical Equipment (Fans, Pilot heat, AC, etc.) .....OFF  
Strobes.....OFF  
Navigation lights..... OFF  
Propeller.....FULL INCREASE  
Throttle.....1000 RPM  
Mixture.....IDLE CUT-OFF  
Ignition Switch.....OFF, KEY OUT  
Alternator Switch.....OFF  
BATT MASTER Switch.....OFF  
Parking Brake.....OFF  
Tiedowns or chocks.....SECURE  
Trash.....REMOVE

**EMERGENCY PROCEDURES**

**ENGINE FIRE DURING START**

Starter.....CRANK ENGINE  
Mixture.....IDLE CUT-OFF  
Throttle.....OPEN  
Electric Fuel Pump.....OFF  
Fuel Selector ..... OFF

**ABANDON IF FIRE CONTINUES**

**ENGINE POWER LOSS DURING TAKEOFF**

*If sufficient runway remains for a normal landing, leave gear down and land straight ahead.*

*If area is rough, or it is necessary to clear obstructions:*

Gear Selector Switch.....UP

*If sufficient altitude has been gained to attempt a restart:*

Maintain safe Airspeed.....79 KIAS  
Fuel Selector.....SWITCH  
Electric Fuel Pump.....CHECK ON  
Mixture.....CHECK RICH  
Alternate Air.....OPEN

**IF POWER IS NOT REGAINED, PROCEED WITH POWER OFF LANDING**

**ENGINE POWER LOSS DURING FLIGHT**

*If at low altitude:*

Air speed .....MAINTAIN 79 KIAS min.

**PREPARE FOR POWER OFF LANDING.**

*If altitude permits:*

Fuel Selector.....SWITCH  
to tank containing fuel  
Elector Fuel pump..... ON  
Mixture.....RICH  
Alternate Air.....OPEN  
Engine Gauges.....CHECK  
for cause of power loss.

*If no fuel flow/pressure is indicated, check tank selector position to be sure it is on a tank containing fuel.*

**If power is not restored:**

**PREPARE FOR POWER OFF LANDING.**

Trim for 79 KIAS

**POWER OFF LANDING**

Airspeed.....MAINTAIN 79 KIAS  
Landing Pattern.....ESTABLISH  
Seatbelts.....TIGHT

***When Committed to Landing:***

Landing Gear Selector.....AS REQUIRED  
Flaps.....AS DESIRED  
Throttle.....CLOSE  
Mixture.....IDLE CUT-OFF  
Ignition .....OFF  
BATT MASTER Switch.....OFF  
ALTR Switch.....OFF  
Fuel Selector.....OFF  
Passenger Door.....PROP OPEN

**Contact surface at minimum possible airspeed**

**FIRE IN FLIGHT**

***Don smoke mask provided.***

Source of Fire.....CHECK

**ELECTRICAL FIRE**

(Smoke in Cabin)

Master Switch.....OFF  
Alternator Switch.....OFF  
Vents.....OPEN  
Cabin Heat.....OFF

**LAND AS SOON AS PRACTICAL**

**ENGINE FIRE**

Fuel Selector.....OFF  
Throttle.....CLOSED  
Mixture.....IDLE CUT-OFF  
Electric Fuel Pump.....CHECK OFF  
Heater.....OFF  
Defroster.....OFF

**PROCEED WITH POWER OFF LANDING PROCEDURE**

### LOSS OF OIL PRESSURE

Land as Soon as Possible And Investigate the Cause.

**PREPARE FOR POWER OFF LANDING**

### LOSS OF FUEL PRESSURE

Electric Fuel Pump.....ON

Fuel Selector.....CHECK on proper tank

### HIGH OIL TEMPERATURE

Land at Nearest Airport and Investigate the Problem

**PREPARE FOR POWER OFF LANDING**

### PROPELLER OVERSPEED

Throttle.....RETARD

Oil Pressure.....CHECK

Propeller Control.....FULL DECREASE

Airspeed.....REDUCE

Throttle.....BELOW 2700 RPM

### ELECTRICAL FAILURES

#### **ALT ANNUNCIATOR LIGHT ILLUMINATED:**

Ammeter.....CHECK TO VERIFY INOP. ALTERNATOR

#### **IF AMMETER SHOWS ZERO:**

Alternator Switch.....OFF

Electrical Load.....REDUCE TO MINIMUM

Alternator Circuit Breaker.....CHECK and RESET

Alternator Switch.....ON

#### **IF POWER NOT RESTORED:**

Alternator Switch.....OFF

Electrical Load..... REDUCE

*If alternator output cannot be restored, reduce electrical loads and land as soon as practical.*

*The battery is the only remaining source of electrical power.*

### ELECTRICAL OVERLOAD

*(Alternator over 20 amps above known electrical load)*

Battery Master Switch.....OFF

#### If ammeter reading does NOT decrease:

Alternator Switch.....OFF

#### **LAND AS SOON AS PRACTICAL.**

**Use Emergency Landing Gear Extension to lower landing gear.**

#### If ammeter reading DOES decrease:

BATT MASTER Switch.....ON

Ammeter.....MONITOR

#### If ammeter reading does NOT begin to decrease within five minutes:

BATT MASTER Switch.....OFF

#### **LAND AS SOON AS PRACTICAL.**

#### If ammeter reading DOES begin to decrease within five minutes:

Proceed with flight.

Ammeter.....MONITOR

### ENGINE ROUGHNESS

Mixture.....ADJUST for smooth operation

Alternate Air.....OPEN

Electric Fuel Pump.....ON

Fuel Selector .....SWITCH TANKS

Engine Gauges.....CHECK

Magneto Switch.....L then R then BOTH

***If operation is satisfactory on either magneto, proceed on that magneto at reduced power, with full RICH mixture, to a landing at the first available airport.***

**IF ROUGHNESS PERSISTS, PREPARE FOR A POWER OFF LANDING**



**EMERGENCY LANDING GEAR EXTENSION**

***Prior to emergency extension procedure:***

BATT MASTER Switch.....CHECK ON  
ALTR Switch.....CHECK ON  
Circuit Breakers.....CHECK  
NAV LIGHT Switch.....OFF (In Daytime)  
Gear Indicator Bulbs.....CHECK

***If landing gear does not check down and locked:***

Airspeed.....REDUCE BELOW 87 KIAS  
Landing Gear Selector Switch...DOWN POSITION

***If gear has still failed to lock down,***

Move and hold the emergency lever down to the Emergency Down Position.

***If gear has still failed to lock down,***  
yaw the airplane abruptly from side to side with the rudder.

***If the nose gear will not lock down,***  
using the above procedure, slow the aircraft to the lowest safe airspeed attainable using the lowest power setting required for safe operation and accomplish the following:

Landing Gear Selector Switch.....RECYCLE  
GEAR THROUGH UP POSITION AND THEN  
SELECT GEAR DOWN.

**SPIN RECOVERY**

Throttle.....IDLE  
Control Wheel.....FULL FORWARD  
WHILE NEUTRALIZING AILERONS  
Rudder .....FULL OPPOSITE  
TO DIRECTION OF ROTATION  
Rudder.....NEUTRAL WHEN  
ROTATION STOPS  
Control Wheel.....AS REQUIRED  
TO SMOOTHLY

REGAIN LEVEL FLIGHT ATTITUDE

**OPEN DOOR IN FLIGHT**

*If both upper and lower latches are open, the door will trail slightly open and airspeeds will be reduced slightly.*

**TO CLOSE DOOR IN FLIGHT:**

SLOW AIRPLANE TO 87 KIAS.  
Cabin Vents.....CLOSE  
Storm Window.....OPEN  
If upper Latch is Open.....LATCH  
If Side Latch is Open .....PULL on ARMREST  
while moving Latch Handle to LATCH position  
If both latches are open.....LATCH  
SIDE LATCH THEN TOP LATCH

**TAWS WARNING**

Autopilot.....DISCONNECT

**Initiate a maximum performance climb:**

Airspeed.....78 KIAS

**After warning ceases:**

Power.....MAX CONTINUOUS  
Airspeed.....90 KIAS

**Climb to safe altitude and report to ATC if applicable.**

**GPS LOSS OF INTEGRITY**

**DR=Dead Reckoning**

**LOI=Loss of Integrity**

*DR means the GPS is estimating your position from your last know location. LOI means the data has become inaccurate and the signal is lost.*

Navigation.....USE ALTERNATE SOURCES

**If no alternate navigation means are available:**

DR Mode.....USE GTN

*Note: GPS Position information will get worse over time.*

LOI Mode.....FLY TO NEAREST VFR CONDITIONS

*Note: Only your last know position will be shown on the map. "GPS SIGNAL LOST" will be superimposed over it.*