

# AIRCRAFT CHECKLIST

## PIPER ARROW IV 2919U

### CABIN

Airworthiness certificate .....CHECK  
Registration.....CHECK  
Operators handbook.....CHECK  
Weight and balance .....CHECK  
Maintenance items ... CHECK CURRENT  
Control wheel .... RELEASE RESTRAINTS  
Master switch ..... ON  
Fuel quantity ..... CHECK QUANTITY  
Stall warning .....CHECK  
Anti-collision lights..... ON\*  
Nav light ..... ON\*  
Taxi/Lnd light ..... ON\*  
Pitot heat ..... ON\*  
\* check functioning as needed

Master..... OFF  
Gear lever ..... DOWN  
Flaps.....LOWER  
Pitot and static system..... DRAIN  
Windshield ..... CHECK CLEAN

### RIGHT WING Trailing Edge

Baggage door ..... CLOSE & SECURE  
Flaps & hinges.....CHECK  
Aileron & hinges .....CHECK

### RIGHT WING

Wing tip and light.....CHECK  
Wing tie down..... DISCONNECT  
Main tire ..... CHECK (30psi)  
Main gear strut ..... 2.5" ±.25"  
Fuel sump..... DRAIN SAMPLE  
Fuel tank ..... CHECK quantity  
Fuel cap.....SECURE  
Fuel tank vent ..... CLEAR

### NOSE

Engine oil ..... Min 4/Fill to 7/Max 8  
Fuel strainer ..... DRAIN  
Prop & spinner..... CHECK for damage  
Nose wheel strut..... 2.75" ±.25  
Nose wheel tire ..... CHECK (27psi)

### LEFT WING

Wing tip and light.....CHECK

Wing tie down..... DISCONNECT  
Main tire ..... CHECK (30psi)  
Main gear strut ..... 2.5" ±.25"  
Fuel sump..... DRAIN SAMPLE  
Fuel tank ..... CHECK quantity  
Fuel cap..... SECURE  
Fuel tank vent ..... CLEAR  
Stall warning .....CHECK  
Pitot/static head ..... REMOVE

### LEFT WING Trailing Edge

Flaps & hinges.....CHECK  
Aileron & hinges .....CHECK

### FUSELAGE

Antennas.....CHECK  
Stabilator & trim tab .....CHECK  
Tie down ..... REMOVE

### BEFORE STARTING ENGINE

Preflight inspection ..... COMPLETE  
Passenger brief ..... COMPLETE  
Hobbs and tach times ..... RECORDED  
Seats.....AJUST & LOCK  
Seat belts .....AJUST & LOCK  
Master avionics switch ..... OFF  
Brakes ..... TEST  
Parking brake ..... SET  
Circuit breakers..... CHECK IN  
Fuel selector valve ..... LOWEST TANK  
Propeller ..... FULL FORWARD  
Alternate air ..... OFF

### STARTING ENGINE

Anti-collision switch ..... ON  
Throttle ..... OPEN 1/2 inch  
Master switch ..... ON  
Electric fuel pump ..... ON  
Mixture ..... PRIME then OFF  
Propeller area ..... CLEAR  
Ignition switch..... START  
Mixture ..... FULL RICH  
Electric fuel pump ..... OFF

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## **AFTER ENGINE START**

Throttle ..... ADJUST 800-1000 RPM  
Oil pressure .....CHECK  
Mixture ..... LEAN for taxi (1")

## **BEFORE TAXI**

Annunciator panel .....CHECK  
Gear indicator lights..... ON  
Master avionics switch ..... ON  
Avionics..... ON  
Transponder.....ON STNDBY  
Crew communication.....CHECK  
ATIS .....OBTAIN  
Clearance .....OBTAIN  
Flaps..... UP  
Parking brake .....RELEASE  
Rolling brake test ..... TEST

## **BEFORE TAKEOFF (run up)**

Parking brake .....SET  
Cabin doors..... CLOSED and LATCHED  
Flight controls ..... FREE and CORRECT  
Flight instruments..... SET  
Fuel selector valve ..... FULLEST TANK  
Elevator & rudder trim.....SET  
Flaps.....SET  
Throttle ..... 2000 RPM  
Mixture.....SET FOR ALTITUDE  
Prop.....CYCLE 3X  
Magnetos ..... 175 drop either  
50 differential  
Oil pressure .....CHECK  
Oil temp.....CHECK  
Ammeter .....CHECK  
Fuel pressure .....CHECK  
Vacuum ..... 4.8 to 5.1  
Throttle .....800 to 1000 RPM  
Friction lock .....SET  
Radios ..... SET and CHECK  
Lights.....AS REQUIRED  
Transponder..... SET SQUACK CODE  
Transponder..... SET ALT  
Takeoff brief..... COMPLETE  
Time .....CHECK  
Brakes .....RELEASE  
Fuel pump ..... ON

## **NORMAL TAKEOFF**

Wing flaps .....SET  
Throttle ..... FULL OPEN  
Elevator control .....Rotate at 65 KIAS  
Climb speed ..... 75 KIAS

## **SHORT FIELD TAKEOFF**

Wing flaps ..... 25°  
Runway .....USE ALL  
Brakes ..... APPLY  
Throttle ..... FULL OPEN  
Engine instruments.....CHECK  
Flight controls ..... NEUTRAL  
Brakes .....RELEASE  
Elevator ..... ROTATE at 55 KIAS  
Climb speed ..... 60 KIAS  
Gear ..... UP  
Climb speed ..... 75 KIAS  
-After clearing obstacle  
Flaps..... UP incrementally  
Climb speed ..... 85 KIAS

## **SOFT FIELD TAKEOFF**

Wing flaps ..... 25°  
Elevator control ..... FULL UP  
Taxi..... CONTINUOUS  
Throttle .....FULL OPEN  
Stay in ground effect until 60 KIAS  
Gear ..... UP  
Climb speed ..... 75 KIAS (Vx)  
Flaps..... 0°  
Climb Speed ..... 85 KIAS

## **AFTER TAKEOFF**

Flaps..... UP  
Gear ..... UP  
Climb speed ..... 87 KIAS  
Prop .....SET  
Engine instruments.....CHECK  
Fuel pump ..... OFF  
Lights.....AS REQUIRED

## **ENROUTE CLIMB**

Airspeed ..... 100 KIAS  
Propeller ..... FULL FORWARD  
Throttle ..... FULL OPEN  
Mixture ..... LEAN for altitude

## **CRUISE**

Manifold press .....SET  
RPM .....SET  
Elevator Trim ..... ADJUST  
Rudder Trim ..... ADJUST  
Mixture ..... LEAN for altitude  
EGT ..... set 75° less/rich of peak  
Switch tanks at 30 min and every hour thereafter.

## **DESCENT**

Mixture ..... FULL RICH  
Alt Air ..... CLOSED

## **IN RANGE (when in radio range)**

ATIS ..... GET WEATHER INFO  
Altimeter .....SET  
Align DG with Compass.....COMPLETE  
Avionics.....SET  
Approach Brief.....COMPLETE

## **BEFORE LANDING**

Gas (fuel selector) ..... FULLEST TANK  
Under Carriage (gear) ..... DOWN  
Mixture ..... RICH  
Props ..... SET FOR LANDING  
Seat Belts ..... ON  
Switches ..... LIGHTS AS REQUIRED  
AUX FUEL PUMP ON

## **NORMAL LANDING**

Approach speed ..... 80 KIAS  
Wing Flaps.....AS REQUIRED  
Final Airspeed ..... 70 KIAS  
Throttle ..... REDUCE to idle  
Touchdown ..... MAIN WHEELS 1ST  
Brakes ..... MIN REQUIRED

## **SHORT FIELD LANDING**

Gear ..... DOWN  
Airspeed ..... 70 KIAS (-0/+10)  
Flaps ..... 40°  
Throttle ..... IDLE when appropriate  
Touchdown ..... MAIN WHEELS FIRST  
Brakes ..... APPLY HEAVILY  
Flaps ..... 0°  
Elevator ..... FULL BACK

## **SOFT FIELD LANDING**

Airspeed ..... 80-70 KIAS  
Wing Flaps..... 40°  
Final Airspeed ..... 65 KIAS  
Throttle ..... ABOVE IDLE  
Touchdown .....SOFTLY  
Nose Wheel..... KEEP UP  
Elevator ..... FULL BACK  
Brakes ..... MIN REQUIRED

## **REJECTED LANDING (go around)**

Throttle ..... FULL OPEN  
Airspeed ..... 70 KIAS  
Gear ..... UP  
Airspeed ..... 77 KIAS  
Wing Flaps..... RETRACT incrementally

## **AFTER LANDING**

Flaps ..... UP  
Mixture ..... LEAN for taxi (1")  
Transponder.....AS REQUIRED  
Aux Fuel Pump ..... OFF  
Lights.....AS REQUIRED

## **ENGINE SHUTDOWN**

Parking Brake .....AS REQUIRED  
ELT.....VERIFY NOT ACTIVE (121.5)  
Master Avionics ..... OFF  
Switches ..... OFF  
Mixture ..... IDLE CUT OFF  
Master Switch ..... OFF  
Ignition Switch ..... OFF

## **SECURE AIRCRAFT**

Yoke ..... SECURE WITH SET BELT  
Wheel Chocks ..... PLACE  
Tie Downs ..... ATTACH  
Doors..... LOCK

## EMERGENCY PROCEDURES

### ENGINE FAILURE DURING TAKEOFF

Throttle ..... IDLE  
Brakes ..... APPLY  
Wing flaps ..... RETRACT  
Mixture ..... IDLE CUT-OFF  
Ignition switch ..... OFF  
Master switch ..... OFF

### ENGINE FAILURE

#### IMMEDIATELY AFTER TAKEOFF

Mixture ..... FULL RICH  
Fuel selector valve ..... SWITCH  
Fuel pump ..... CHECK ON  
If no power, go to forced landing

### ENGINE FAILURE DURING FLIGHT

Mixture ..... RICH  
Prop ..... FULL FORWARD  
Fuel pump ..... ON  
Fuel selector ..... SWITCH TANKS  
Ignition switch ..... BOTH

### FORCED LANDING

Airspeed ..... 79 KIAS  
Mixture ..... IDLE CUT-OFF  
Fuel pump ..... OFF  
Fuel selector valve ..... OFF

\* If time permits: Emergency call,  
squawk 7700, brief passengers,  
stow loose articles

Gear ..... AS REQUIRED  
Master switch ..... OFF  
Wing flaps ..... 40°  
Touchdown ..... SLIGHTLY TAIL LOW

### ENGINE FIRE DURING START

Cranking ..... CONTINUE  
If engine starts:

Power ..... 1700 RPM for a few minutes  
Engine ..... SHUTDOWN

If engine fails to start:

Cranking ..... CONTINUE  
Fire extinguisher ..... OBTAIN

Mixture ..... IDLE CUTOFF  
Throttle ..... OPEN  
Fuel pump ..... OFF  
Fuel selector valve ..... OFF  
Fire ..... EXTINGUISH

### ENGINE FIRE IN FLIGHT

Mixture ..... IDLE CUT-OFF  
Fuel selector valve ..... OFF  
Fuel pump ..... OFF  
Master switch ..... OFF  
Cabin heat & air ..... OFF  
Emergency descent ..... INITIATE

### CABIN FIRE IN FLIGHT

Master switch ..... OFF  
Vents ..... OPEN  
Heat ..... CLOSED  
Fire extinguisher ..... EXTINGUISH  
Emergency descent ..... INITIATE

### EMERGENCY DESCENT

Airspeed ..... 108 KIAS  
Gear ..... DOWN  
Wing flaps ..... 40°  
Rudder ..... FULL SLIP

### EMERGENCY GEAR EXTENSION

Master switch ..... ON  
Circuit breakers ..... CHECK  
Panel lights ..... OFF (in daytime)

Gear indicator bulb ..... CHECK  
Airspeed ..... below 87 KIAS  
Gear lever ..... DOWN  
Emer gear lever ..... PUSH DOWN

If gear still is not locked down:

-Yaw aircraft rapidly back and forth  
-Recycle gear lever