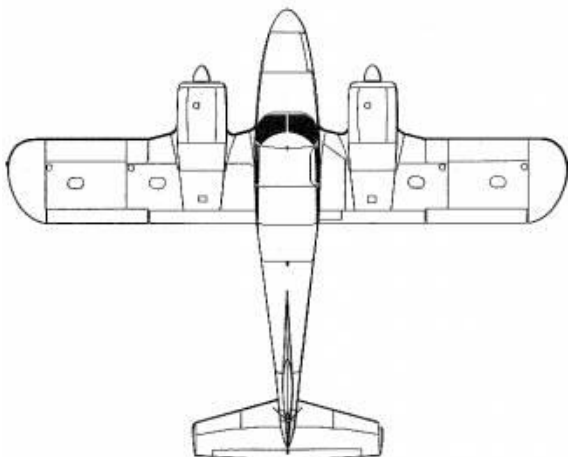


KANATA AVIATION TRAINING

CHECKLIST PA 23-250 Piper AZTEC

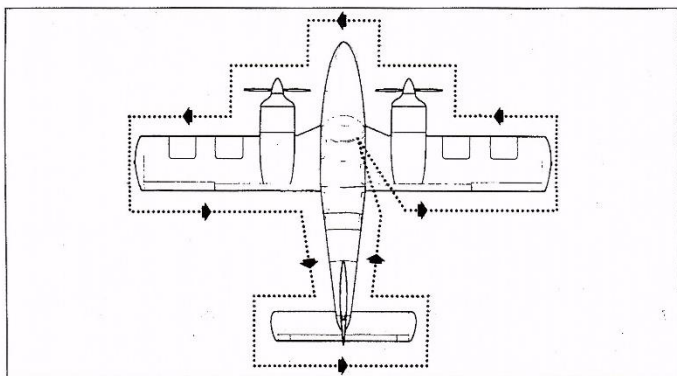


ORIGINAL VERSION MARCH 2022

PREFLIGHT INSPECTION

INSIDE CABIN

- | | |
|---------------------------|------------------------|
| ▪ Landing Gear control | Neutral Position |
| ▪ Avionics Switch | OFF |
| ▪ Fuel pumps | OFF |
| ▪ Mags | OFF |
| ▪ Flaps (Manual Pump) | Down |
| ▪ Alternators switches | ON |
| ▪ Alternate Static Source | Drain |
| ▪ Circuit Breakers | Check all in |
| ▪ Heater Switch | OFF |
| ▪ Trims (Pitch & Yaw) | Take-off |
| ▪ Cowl Flaps | Open |
| ▪ Master Switch | ON |
| ▪ Landing gear lights | 3 GREEN |
| ▪ Fuel Quantity | Min 70 Gal (1/2 tanks) |
| ▪ Cross feed | ON |
| ▪ L/H fuel pump | ON |
| ▪ Cross feed line | Drain |
| ▪ L/H fuel pump | OFF |
| ▪ R/H Fuel pump | ON |
| ▪ Cross feed line | Drain |
| ▪ R/H fuel pump | OFF |
| ▪ Cross feed | OFF |
| ▪ Door Ajar light | ON |
| ▪ Int/Ext lights | CHECKED |
| ▪ Master Switch | OFF |
| ▪ Emergency Window | Secure |
| ▪ Exterior Inspection | Complete |



WALK AROUND

- Forward baggage door Secures, locked, key removed
- Windshield Clean
- Left engine nacelle and landing gear Check as right side
- Pitot Tube Clear, checked
- Stall warning vanes Check
- Anti retraction switch Check
- Dorsal fin air scoop Clear
- Empennage Check, no ice
- Stabilator Free
- Antennas Check
- Navigation and landing lights Check
- Wheel chocks and tie down Removed

OUTSIDE CABIN

- Crossfeed drains verify no leak
- Right wing aileron and flap Check, no ice
- Right main gear No leaks
- Strut Proper inflation
- Tire Check
- Right Fuel vents check clear
- Right leading edge Check, no ice
- Fuel Cap Open, check qty, and color, secure
- Right engine nacelle Check oil [6-10 Qts]
- Right Propeller Check
- Cowl Flaps OPEN and secure
- Fuel drains Drain
- Nose section Check
- Nose Gear No leaks
- Strut Proper inflation
- Tow bar Removed and stowed
- Landing light Check

PASSENGER BRIEFING

- Seat & Belt Adjustments
- No Touch Controls & Instruments
- Doors and Emergency Exit.
- Fire Extinguisher
- First Aid Kit
- Quiet During Radio Calls
- Look for Traffic
- ELT /

In the event of a forced landing

- Stay calm
- Remove glasses and pen
- Unlatch door
- Exit towards back

BEFORE STARTING ENGINE

- Aircraft documents On board
- Pilot Documents On board
- Flight Plan /Itinerary Filed
- Transponder code Obtained if required
- Flight sheet Filled

STARTING ENGINE

- Hobbs / Time Noted
- Seats Adjusted
- Seat Belts and harness Fasten/adjusted
- Parking Brake Set
- Circuit breakers In
- Radios OFF
- Cowl flaps Open
- Alternate Air OFF
- Alternators ON
- Master Switch ON
- Beacon ON
- **1 ENGINE AT A TIME**
- Fuel Selector Outboard
- Mixture Idle cut-off
- Throttle ½" FORWARD

- Prop Control FULL FORWARD
- Magnetos ON
- Cross feed OFF
- Fuel Pump ON
- Mixture Full rich (5-10 sec) for FF
- Mixture ICO
- Starter Engage
- Mixture Increase to full as engine starts
- Throttle 1000 RPM
- Oil Pressure Check
- Suction Very red ball disappeared
- Ammeter Check
- Mixture Lean for taxi

REPEAT for OPPOSITE ENGINE

STARTING FLOODED ENGINE

- Mixture Idle Cut-Off
- Throttle FULL FORWARD
- Propeller FORWARD
- Master Switch ON
- Ignition Switches ON
- Fuel pump OFF
- Propeller Clear
- Starter Engage
- Throttle Retard when engine fires
- Mixture Advance slowly

AFTER START

- Cross feed ON
- Left fuel tank OFF
- Flaps UP
- Heater As required
- Avionics Master ON
- GPS Database Valid
- HIS Slaved & Accurate
- Transponder Standby
- Altimeter Set
- Radios Set & Test as applicable

TAXIING

- Left fuel Tank Inboard
- Right fuel tank OFF
- Taxi light ON
- Navigation lights As required
- Taxi Clearance As Applicable
- Throttle Apply slowly
- Brakes Check
- Steering Check
- Instruments Check

RUN UP BEFORE TAKE-OFF

- Parking brakes ON
- Right fuel tank Inboard
- Cross feed OFF
- Mixture control FORWARD
- Prop Control FORWARD
- Throttle Control 1500 RPM
- Prop Control Check Feathering, 500 RPM max drop
- Throttle control 2200 RPM
- Prop Control x3(MP,RPM,oil Press) Check
- Alternate Air Check
- Magnetos Check drop. 125RPM max. Diff drop 50RPM
- Alternator Output Check
- Gyro Pressure gauge Check
- Throttle idle then 1000 RPM
- Engine gauges in the Green
- Cowl flaps Set
- Seat backs Erect
- Wing flaps Set
- Trim Set
- Seat belts/harness Fasten / adjust
- Controls Free, full travel
- Doors Latched
- Pitot heat As required
- Transponder ALT
- Time Noted
- Landing light ON

TAKEOFF BRIEFING

This is going to be a (Normal/short/x-wind take-off). In case of engine hesitation or failure on runway, both throttles back, max braking, exit runway advise ATC taxi-back to investigate. In case of engine failure after rotation below 102MPH (VYSE) and with enough remaining runway, both throttles back land on remaining runway.

If no remaining runway or if failure after 102MPH (VYSE), IVF (Identify, Verify and Feather) Maintain VXSE (97MPH) if obstacle. When cleared or if none maintain VYSE (102 MPH).

VFR = Circuit and return for landing

IFR = Advise ATC as soon as Possible for desired intention

Only communication regarding the flight is permitted until at least 1000AGL or higher as directed by PIC

TAKEOFF

Do not exceed 40 in. Hg. Manifold pressure. Fast taxi turns immediately prior to takeoff run can cause temporary malfunction of one engine during takeoff.

Normal sea level takeoff at 39 in. Hg. and 2575 RPM.

Adjust mixture prior to takeoff from high elevations. Do not over heat. Do not exceed 40 in.Hg. manifold pressure.

NORMAL TAKEOFF (Flaps up)

- Flaps UP
- Throttles 1500 RPM

- Engine gauges Check in the green
- Throttles Full
- Rotate 85 MPH (Vmc+5)
- After breaking ground, 102MPH (VYSE)
- Gear Tap Brakes and UP
- Climb speed 120MPH (VY)

After Take-off at +1000 AGL

- Flaps and Gear confirm UP
- Climb Power 26"-2400RPM
- Engine gauges In the green
- Taxi and Landing light OFF
- Cowl flaps as required

CRUISING

- Power Set
- Propellers Set
- Mixture Adjust
- Cowl Flaps As required
- Fuel pumps (1 at a time) OFF (check FF)
- Fuel Tanks Time the switch
- Engine gauges Monitor

Suggested power setting

	ALTITUDE	MP	RPM	GPH
NORMAL	4000	26	2400	34
INTERMEDIATE	6000	24	2400	31
ECONOMY	6400	24	2200	28.2
PRACTICE AREA/Long range cruise	6500	22	2200	26

APPROACH AND LANDING

- Airspeed As required to fit with traffic
- Seat belts and harness fasten/adjust
- Fuel selectors Check for proper tank
- Cowl flaps Closed
- Fuel pumps ON
- Landing & Taxi lights ON
- Mixture controls as a/c descends Rich
- Flaps 1: 160MPH
- Gear Down 150 MPH Wait for handle
- Land gear lights 3 Green and Mirror
- Flaps 2: 140 MPH
- Flaps 3: 125 MPH
- Propellers Full fwd on final
- Brake pressure Check

Short Final Call out

**TWO RED
TWO BLUE**

**THREE GREEN, MIRROR CONFIRM
RUNWAY IN SIGHT
STABLE
CLEARED TO LAND**

AFTER LANDING

When clear of runway:

- Flaps (confirm before selecting) UP
- Cowl Flaps Fully OPEN
- Heater (if used) FAN
- Landing time Noted
- Transponder Standby
- Fuel Pumps OFF

- Landing light OFF
- Pitot Heat OFF
- Mixture Lean for Taxi
- Taxi Clearance Obtain if required

SHUTDOWN

- Throttle 1000RPM
- Radio 121.5Mhz listen
- Radio Back to 123.0
- Taxi light OFF
- Avionics master OFF
- FAN OFF if 2min or more
- All lights except beacon OFF
- Dead magnetos Check
- Mixture ICO
- Magnetos OFF
- Fuel pumps Test
- Master Switch OFF
- Hobbs/Time Noted

EMERGENCY PROCEDURES**AIRSPEED FOR SAFE OPERATIONS**

▪ VMC	80 MPH
▪ VYSE (Blue line)	102MPH
▪ VY	120 MPH
▪ VXSE	97 MPH
▪ VX	107 MPH
▪ VA	149 MPH
▪ VNE	249 MPH
▪ Single engine Cruising speed	138 MPH

ENGINE INOPERATIVE PROCEDURES**ENGINE SECURING PROCEDURE
(FEATHERING PROCEDURE)**

To attempt to restore power prior to feathering:

▪ Mags	Check
▪ Fuel Pump	ON
▪ Mixtures	As required
▪ Alternate Air	Check
▪ Fuel Selector	Switch tanks
▪ Cross Feed	ON

If engine does not start, Feather before RPM drops below 1000RPM.

▪ Throttle	Idle
▪ Propeller	Feather
▪ Mixture	ICO
▪ Fuel pump	Off
▪ Fuel selector	Off

ENGINE FAILURE DURING TAKEOFF**(Below 85 MPH)**

If engine failure occurs during takeoff and 85 KIAS has not been attained:

Throttles CLOSE both immediately

Stop straight ahead.

If inadequate runway remains to stop:

Throttles

Brakes apply

Master switch

Fuel selectors

Continue straight ahead, turning to avoid obstacles.

CLOSED
max.braking
OFF
OFF

ENGINE FAILURE DURING TAKEOFF**(85 MPH or above)**

If engine failure occurs during takeoff ground roll, or after lift-off with gear still down and 85 KIAS has been attained:

If adequate runway remains CLOSE both throttles immediately, land if airborne and stop straight ahead.

If runway remaining is inadequate for stopping, decide whether to abort or continue. If decision is made to continue, maintain heading and airspeed, retract landing gear when climb is established and feather inoperative engine prop (see Engine Securing Procedure).

ENGINE FAILURE DURING FLIGHT

- Rudder apply toward operative engine
- Mixture Rich
- Propeller Full Fwd
- Throttle Full
- Gear UP
- Flaps UP
- Inop. Eng identify Dead foot-Dead Engine
- Inop. Eng verify Throttle back to confirm

If no fire and non critical moment of flight, Troubleshoot

- Mags Check
- Fuel Pump ON
- Mixtures As required
- Alternate Air Check
- Fuel Selector Switch tanks
- Cross Feed ON

If engine does not restart secure it before rpm drop below 1000

- Throttle Idle
- Propeller Feather
- Mixture ICO
- Fuel pump Off
- Fuel selector Off

FUEL MANAGEMENT: CROSS FEEDING

- Cross feed ON
- Fuel Selector Inop engine Select Tank

- Fuel pump inop engine ON
- Fuel selector good engine OFF
- Fuel pump good engine OFF

SINGLE ENGINE LANDING

- Inop. engine prop feather
- *When certain of making field:*
- Landing gear extend
- Wing flaps lower
- **Maintain additional altitude and speed during approach.**
- Final approach speed 102 MPH
- Wing flaps ½ unless a short rwy

SINGLE ENGINE GO-AROUND**(Avoid if at all possible.)**

- Mixture forward
- Propeller forward
- Throttle open slowly to Full
- Flaps retract
- Landing gear retract
- Airspeed 102 MPH
- Trim set
- Cowl flap operating engine as required

AIR START (UNFEATHERING PROCEDURE)

- Fuel selector inop. engine ON
- Throttle open 1/2 inch
- Prop control forward to cruise RPM position
- Mixture ICO or full to prime then ICO

- Magnetos ON
- Starter Engage
- Mixture Enrich as engine starts
- Throttle 1000-1400 rpm
- Oil Pressure & temp Look for a rise
- Throttle Back to cruise when gauge in green

ENGINE FIRE ON GROUND

- If engine has not started:
 - Mixture idle cut-off
 - Throttle open
 - Starter crank engine
- If engine has already started and is running, continue operating to try pulling the fire into the engine.
If fire continues, extinguish with best available means.
If external fire extinguishing is to be applied:*
- Fuel selector valves OFF
 - Mixture idle cut-off

ENGINE FIRE IN FLIGHT

- Affected engine:
- Fuel selector OFF
 - Throttle close
 - Propeller feather
 - Mixture idle Cut-off
 - Heater OFF
 - Defroster OFF

MANUAL EXTENSION OF LANDING GEAR

Check following before extending gear manually:

- Circuit breakers Check
 - Master switch ON
 - Alternators Check
 - Navigation lights OFF (daytime)
- To extend, position handle down and proceed as follows:***
- Airspeed reduce (150MPH Max)
 - Gear selector GEAR DOWN LOCKED position
 - Emerg. Hydraulic pump handle Pull
 - Hydraulic handle Pump up and down (approx. 50 times)
 - Indicator lights 3 green
 - Landing gear handle Neutral
 - Land As soon as possible

If unable to extend gear with hydraulic pump handle

- Landing gear Handle DOWN
- Raise firing ring cover under left front seat
- Pull ring as far as possible

After operating CO2 system the landing gear should not be operated and the handle should not be moved until repairs are done.

PROPELLER OVERSPEED

- Throttle REDUCE
- Throttle Increase as necessary
- Land as possible

ELECTRICAL FAILURES

In the event of failure of the voltage regulating system; an abnormal operation may be indicated by a zero output on both alternators position and discharge on the battery position. To energize the auxiliary system:

- Aircraft electrical load Reduce
- Voltage regulator selector AUX
- CB Reset **EXCEPT** “MAIN” voltage regulator breaker
- Turn Load Back ON

If this fails to maintain correct output while using AUX

- Electrical load Reduce
- Master switch OFF
- Both Alternators OFF
- CB “MAIN” and “AUX” RESET
- Master Switch ON
- Alternator Reset 1 at a time
- Very load does not exceed output capability

GYRO PRESSURE FAILURES

Pressure below 4.5 in Hg.

RPM increase to 2575
 Altitude descend to maintain 4.5 in Hg
 Use electric turn indicator to monitor Directional Indicator and Attitude Indicator performance.

COMBUSTION HEATER OVERHEAT

Unit will automatically cut-off.
 Do not attempt to restart.

SPINS

Throttles	retard to idle
Rudder	full opposite to direction of spin
Control wheel	release back pressure
Control wheel	full forward if nose does not drop
Ailerons	neutral
Rudder	neutralize when rotation stops
Control wheel	smooth back pressure to recover from dive

EMERGENCY DESCENT

Throttles	closed
Propellers	full forward
Mixture	as required for smooth operation
Landing gear	extend
Airspeed	150 MPH

IFR PROCEDURES

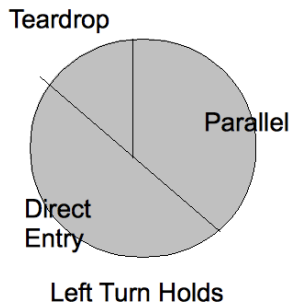
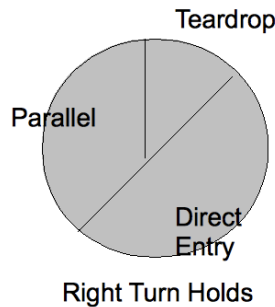
TAKE-OFF CLEARANCE

C-GSYH cleared to _____ airport, SID procedure (if applicable)
depart runway _____ flight planned route (or modified), squawk
code _____

Hold Procedure

- T : Type of entry
- S: Speed for the hold (less than 175KIAS)
- A: Altitude as per holding instructions
- F: Fuel (destination-Alternate +45min)
- E: Expect Further clearance time

- T: Turn into the hold
- T: time when wings level and at proper position
- T: Twist for inbound course
- T: Track, correcting for wind
- T: Talk, advise ATC entering the hold and established if Not radar ID



APPROACH

WARGAME

- W: Weather
- A: Altimeter setting
- R: radio Set Up
- G: GPS load approach
- G: Gyro reset if applicable
- A: Altitude correction if applicable
- M: Missed approach Procedure
- E: Expected procedure : Brief plate from top to bottom

NOTES

PA23-250D SPEEDS

- ❖ VS0: 68 MPH
- ❖ VS: 74 MPH
- ❖ VFE: 125 MPH
- ❖ VX: 107 MPH
- ❖ VY: 120 MPH
- ❖ **VMC: 80 MPH**
- ❖ **VYSE: 102 MPH**
- ❖ VXSE: 97 MPH
- ❖ VA: 149 MPH
- ❖ VNO: 216 MPH
- ❖ VNE: 249 MPH
- ❖ VSSE: 120 MPH KIAS
- ❖ Max. demo x-wind: 15 Kts