



# CHECKLIST

**Pitts S2A**

**VH-IPU**



## Pitts S2A VH-IPU AIRCRAFT SPECIFICATIONS

### Airspeeds for Normal Operations

#### Take off & Landing Speeds

Rotate Speed (Vr)	60kts	Normal Approach (Flaps Up)	80 - 90kts
Best Glide Speed	80kts	Max Crosswind	17kts

#### General Speeds

Never Exceed (Vne)	176kts	Turbulence Penetration Speed (VTurb)	134kts
Max Normal Operating (Vno)	134kts	Level Stall Speed (Vs)	50kts

#### Fuel & Oil

Fuel Type	100LL or 100/130 Avgas	Engine Type and Horsepower	Avco Lycoming 200BHP @ 2700RPM
Maximum Fuel	88 litres	Oil Grade	Aero W100
Max Useable Fuel	85 litres	Maximum Oil	7 Quarts
Fuel Consumption	40 Litres/Hour	Minimum Oil	6 Quarts

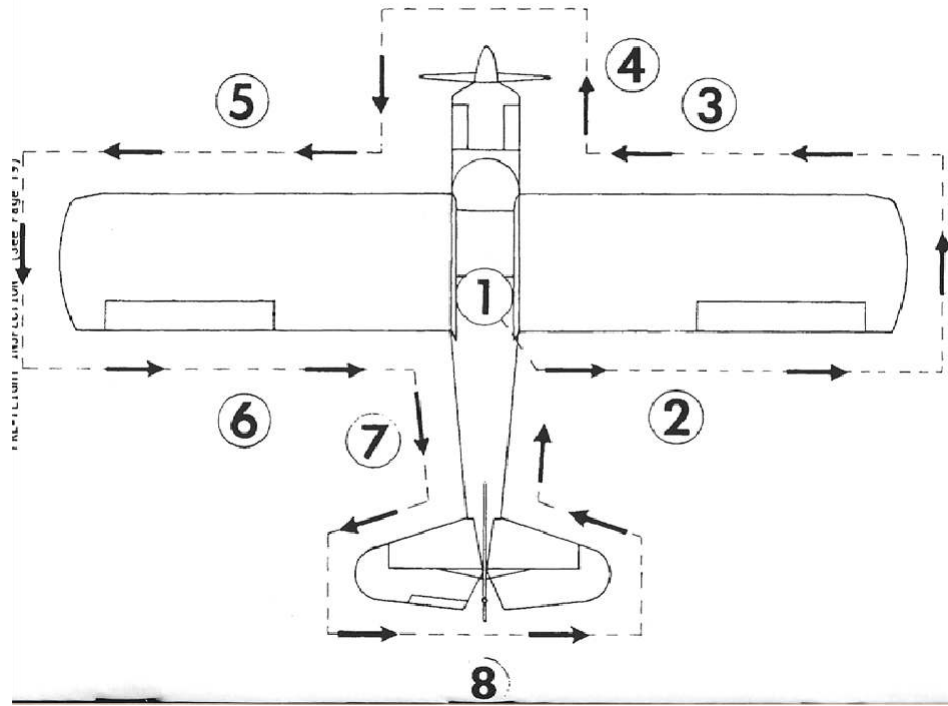
**\*\*Note: 100LL Avgas is BLUE in colour and 100/130Avgas is GREEN\*\***

#### Performance

Basic Empty Weight	467 Kg	Maximum Power	2700 RPM
Max Take off Weight	716 kg	Climb Power	Full RPM
Max Landing Weight	716 kg	Normal Cruise	2500 RPM

**\*\* Note: Max Load with Full Fuel: 185kg \*\***

## PRE FLIGHT



### **(1) COCKPIT**

- a. Release control stick from seat belt, check freedom of movement.
- b. Check ignition switch "OFF".
- c. Check fuel quantity on fuel gauge.
- d. Fuel valve "ON".
- e. Inspect seat belt for condition.
- f. Secure rear seat belt and shoulder harness if not in use.
- g. Before aerobatic flights, remove loose articles and equipment.

### **(2) RIGHT WING TRAILING EDGE**

- a. Check wing root covers and greenhouse for security.
- b. Drain gas from fuel drain and check for leakage.
- c. Check aileron for freedom of movement and security.
- d. Check condition and security wing, wing tip and lights.
- e. Check condition and security struts and strut fittings.

### **(3) RIGHT WING LEADING EDGE**

- a. Check right main wheel for proper inflation.
- b. Check brakes and lines for leakage and security.
- c. Inspect wheel fairing for security.
- d. Check right fuel quantity and filler cap security.
- e. Check condition door jettison mechanism.

### **(4) FRONT FUSELAGE & ENGINE**

- a. Check oil level and secure dipstick.
- b. Inspect engine compartment for general condition, gas leaks, oil leaks, etc.
- c. Drain gas from gascolator and check for leakage.
- d. Check windshield for cleanness.
- f. Check prop for nicks and prop spinner for security.
- g. Check air filter for cleanliness and security.

**(5) LEFT WING LEADING EDGE**

- a. Check left main wheel for proper inflation.
- b. Check brakes and lines for leakage and security.
- c. Inspect wheel fairing for security.
- d. Check left fuel quantity and filler cap security.
- e. Inspect stall warning switch for freedom.
- f. Check pitot-static tube for stoppage.

**(6) LEFT WING TRAILING EDGE**

- a. Check condition and security wing, wing tip and lights.
- b. Check condition and security struts and strut fittings.
- c. Check aileron for freedom of movement and security.
- d. Drain gas from fuel drain and check for leakage.
- e. Check wing root cover for security.

**(7) AFT FUSELAGE**

- a. Drain gas from aft fuselage drain.
- b. Inspect bottom of aircraft for general condition.

**(8) TAIL**

- a. Check control surfaces for freedom of movement and security.
- b. Check tailwheel security and proper inflation.
- c. Check condition and security of tail and tail brace wires.

## Pre Start

Pre Flight Inspection	Complete
Position	Clear
Maintenance Release	Check
Flight Manual	On-
board Pax Brief	<ul style="list-style-type: none"><li>• Entry and exit points/emergency exits</li><li>• Seat adjustment</li><li>• Seatbelt usage</li><li>• Stowage of loose items</li><li>• Ventilation outlets and controls</li><li>• Remain clear of flight controls</li><li>• Emergency Equipment and how to use</li><li>• No Smoking policy</li><li>• Flight details</li></ul>
Security	Check
Seats	Adjusted and Secured
Hatches & Harness	Secure
Fuel	On and sufficient
Circuit breakers	set
Switches and Avionics	Off
Brakes	Test and Set

## Start Procedure

Mixture	Idle Cut off
Pitch	Full fine
Throttle	Cracked
Master Switch	On
Prime	As req'd
Clear Prop	
Magnetos	Both
Ignition	Push starter switch

Mixture Full rich as engine starts

## AFTER START

### ROVER

Revs	Set 1000
Oil Pressure	Green within 30 seconds
Vacuum	Check
Electrics	Alternator On – Charging
Radio	Avionic Master On
	Radios On & Check Frequency and Squelch
	Transponder SBY .... Code set

## TAXI

### BAG

Brakes	Test and check
Avionics	Check and set
Gyro's	Check

## PRE TAKEOFF – BRAKES ON

Trim	Check and Set
Mixture	Rich
Primer	In and Locked
Fuel	On and sufficient
Instruments	Altimeter.....Elevation/QNH set Turn Co coordinator... No Flags Oil Temp ..... 100 245 Fahrenheit Oil Pressure ..... 60-100 psi
Switches	Test Idle Set 1800RPM Alternate Air ..Test Magnetos <ul style="list-style-type: none"><li>• Max Drop ..... 175RPM</li><li>• Max Difference ... 50 RPM</li></ul> Smooth Running Engine Instruments <ul style="list-style-type: none"><li>• Temps and Pressures .. <b>Within Limits</b></li><li>• Ammeter..... POSITIVE CHARGE</li><li>• Propeller ..... Cycle x 3 (once if hot)</li></ul> Set 1000RPM Circuit Breakers..... In
Controls	Full Free and correct
Hatches and Harnesses	Secure

Emergency Brief	Complete
Departure brief	Complete

## LINING UP

Alignment -	Compass, DG and Runway
Controls -	Checked
Undercarriage -	Fixed
Transponder -	On ALT
Emergency -	Briefed
Switches -	Magnetos On BOTH

## AFTER TAKEOFF/ GO AROUND

### PUFSIT

Power	Full
Undercarriage	Fixed
Instruments	Climb performance, Centreline tracking Check
Temps and Pressure	within limits

## MANOEUVRES

### HASEL

Height	Sufficient to safely complete all manoeuvres
Area	Suitable
Security	Cabin secure/seats/harnesses
Engine	Power and Mixture Checked Engine T's & P's within limits
Lookout	Area Clear

## ENROUTE

### CLEAROFFS

Compass & Course	Align and Tracking
Log	ETA's
Engine	Lean and Green
Altitude	QNH set and correct
Radios	Frequency set & correct
Orientation	
Fuel	Log and contents
Forced Landing	
Sartime	

## PRELANDING/DOWNWIND

### **BUMFISH**

<b>B</b> reaks	Pressure and off
<b>U</b> ndercarriage	Fixed
<b>M</b> ixture	Rich
<b>F</b> uel	On and sufficient
<b>I</b> nstruments	Altitude T's and P's <i>within limits</i>
<b>S</b> witches	N/A
<b>H</b> atches and Harness	Secure

## FINAL

### **CPUFF**

<b>C</b> arby Ht	Off
<b>P</b> itch	Full Fine
<b>U</b> ndercarriage	Fixed
<b>F</b> lap	N/A
<b>F</b> uel	Sufficient for Go-Around

## AFTER LANDING

Transponder	SBY
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## SHUTDOWN

Throttle	Set 1000RPM
Avionics	Radios and Nav aids Off
Mixture	Idle Cut off
Ignition	Off and Keys out
Master Switch	Off

# **EMERGENCIES**

## **POWER LOSS IN FLIGHT**

### **AFMOST**

<b>A</b> lternate Air	On
<b>F</b> uel	On, Primer in and locked
<b>M</b> ixture	Rich
<b>O</b> il	T's & P's check
<b>T</b> hrottle	Cycle and set

## **ENGINE FIRE ON GROUND**

Throttle	Full Open
Mixture	Idle cut off
Cranking	Continue to attempt a start
Fire Extinguisher	Ready
Fuel	Off
Master	Off
Ignition	Off
Fire Extinguisher	Use
Inspect for Damage	

If fire persists or is not limited to intake or exhaust system:

Mixture	Idle Cut Off
Fuel	Off
Switches	All Off
<b><u>EVACUATE</u></b>	
Fire extinguisher	Use

## **ENGINE FIRE IN FLIGHT**

Mixture	Idle cut off
Fuel	Off
Switches	All Off
Cabin Heat and air	Off
<b>Land as soon as possible</b>	

## **ELECTRICAL FIRE**

Alternator and Master	Off
Switches All except ignition	Off
Vents/Cabin air/Heat	Off – open only if absolutely necessary for smoke removal
<b>If fire appears to be out:</b>	
Alternator and Master	On
Circuit Breakers	Check for faulty circuit... do not reset
Radio/Electrical Switches	On one at a time with a delay after each until short circuit is localized
Vents/Cabin Air/Heat	Open once fire is completely extinguished



## ELECTRICAL POWER LOSS

Alternator & Master	Cycle in attempt to reset overvoltage relay
Switches	All Off
Alternator	On
Essential Equipment	On
Land	As soon as possible

