



PA44 - 180 QRH

USE OF THIS CHECKLIST

This Checklist is to be used at all times, together with the Company Operations Manual and Standard Operating Procedures. However, information contained in this Checklist does not take precedence over the CASA approved Aircraft Flight Manual and other regulatory requirements.

The **Normal Checklist** (indicated by a **GREEN** table) contains the routine procedures for normal operation of the aircraft that provide an acceptable level of airworthiness. Checklist titles encased in **BLACK** are to be committed to memory and actioned without recourse to the written checklist.

The **Abnormal Checklist** (indicated by a **YELLOW** table) contains procedures which, if followed, will maintain an acceptable level of airworthiness or reduce operational risk resulting from a failure or abnormal condition. The procedures under this part supplement Normal Checklist when a failure or abnormal condition exists.

The **Emergency Checklist** (indicated by a **RED** table) contains procedures to protect the occupants and the aircraft from harm during a critical situation requiring an immediate response. The procedures under this part supplement the Normal Checklist when an emergency condition exists. Checklist titles encased in **BLACK** are to be committed to memory and actioned without recourse to the written checklist. These are of particular relevance to critical emergency related procedures where immediate action is required.

In addition to the outlined items in both Emergency & Abnormal Checklists, the following steps are considered part of all emergency/abnormal situations:

Control the Aircraft

Assess the Situation

Take Appropriate Action



LEARN TO FLY



LIMITATIONS X



AIRSPEEDS	
V NE	202
V NO	169
V A	112 – 2700 LBS
	135 – 3800 LBS
V FE	111
V X / V Y	82 88
V LOR V LOE	109 140
V LE	140
V MCA / V YSE	56 / 88
V SO	55
V SI	57
V R	75
V APPROACH	90
V AT	75
X-WIND	17

WEIGHTS	
M TOW	3800 LBS
M LW	3800 LBS
M BAGGAGE	200 LBS

OTHERS	
FUEL	110 USG - TOTAL
	108 USG - USABLE
OIL	4 QTZ - MIN
	6 QTZ - MAX

PRE FLIGHT INSPECTION



1. CABIN	
Documentation	Complete & Current
Landing Gear Control	DOWN
Switches	ALL OFF
Masters	ON
Landing Gear Lights	3 GREENS
Fuel Quantities	Check
Lights & Pitot Heat	All ON & Inspect
Fuel Selector (2)	ON
Flaps	Check
Cowl Flap (2)	Open
Engine Control Levers	Check Condition & Movement IDLE FINE ICO
Controls	Free
Trim	Set for T/O
Pitot & Static System	Drain
Empty Seats	Fasten Seatbelts
Emergency Exit	Closed & Locked

2. RIGHT FUSELAGE & WING	
Fuel Sump Drains	Drain & Inspect
Wing, Aileron & Flap	Check
Main Gear, Strut & Tyre	Check Condition & Inflation
Wing Tip	Check
Nav & Anti-Collision Lights	Check
Leading Edge	Check
Fuel Quantity	Check Visually
Oil Level	4 QTZ – Min
Propeller	Check
Cowl Flap	Open & Secure

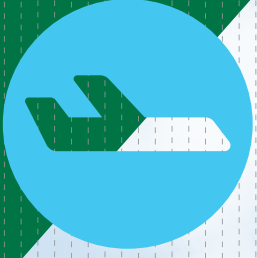
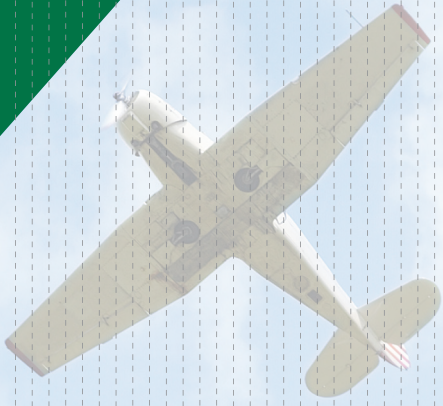
3. NOSE	
Nose Section	Check
Nose Gear, Strut & Tyre	Check Condition & Inflation
Tow Bar	Remove & Stow
Landing Light	Check
Windshield	Clean

4. LEFT FUSELAGE & WING	
Cowl Flap	Open & Secure
Propeller	Check
Oil Level	4 QTZ – Min
Fuel Quantity	Check Visually
Leading Edge	Check
Stall Warning Vanes	Check
Pitot/Static Mast	Check & Clear
Wing Tip	Check
Nav & Anti-Collision Lights	Check
Main Gear, Strut & Tyre	Check Condition & Inflation
Wing, Aileron & Flap	Check

5. EMPENNAGE	
Empennage	Check
Stabilator	Check
Antennas	Check
Nav & Landing Lights	Check
Baggage Door	Secure & Lock

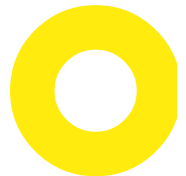
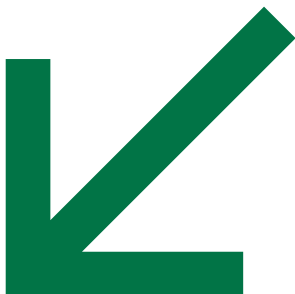


◦ NORMAL CHECKLIST



1. BEFORE START

Pre-Flight	Completed
Documentation	On-Board
Start Position	Suitable
PAX Brief	Completed
Seats	Adjusted
Hatches & Harness	Secured
Park Brake	Reset ON
Fuel Selector (2)	ON
Cowl Flap (2)	Open
Carby Heat (2)	OFF
Engine Control Levers	IDLE FINE ICO
Manual Gear Extension Handle	Pushed In
Gear Selector	DOWN
Switches	ALL OFF
Masters & Alternators	ON
Circuit Breakers	Checked
ELT	Armed / Portable
CO Detector	Tested
Flight Times	Checked
MR & Trip Sheet	Completed
Fuel Quantities	Checked or Reset



2. START PROCEDURE

Start LH Engine First

	Normal	Hot	Flooded
Magnetos	BOTH	BOTH	BOTH
Throttle	¼ "	½ "	Max
Mixture	RICH	RICH	ICO
Fuel Pump	ON	ON	OFF
Primer	5 - 8 Strokes	-	-
Starter	Engage	Engage	Engage
Throttle	-	-	Retard
Mixture	-	-	RICH

3. AFTER START

Throttle	1000 RPM
Oil Pressure	GREEN within 30 s
Suction	GREEN
Ammeter	Charging
Fuel Pump	OFF
Repeat From 2. For RH Engine Start	

Fuel Selector (2)	X-Feed
Avionics	ON, Checked Serviceability
Flaps	UP
Radios – COM 1	CTR / CTA
– COM 2	ATIS / AWIS / CTAF
ATIS & QNH	Checked & Set
Transponder	Checked Code & STBY
DG	Aligned
Flight Plan	Loaded & Verified
Fuel Selector (2)	ON

4. TAXI	
Brakes	Checked
Turning Left Right	Compass & HSI ↓ ↑
	Right Left Skid
	AI No Topple

5. PRE-TAKE-OFF	
Park into Wind	
Park Brake	ON
T Throttle (2)	1000 RPM
Trims	Tested & Set for T/O
M Mixture (2)	RICH
Magnetos	BOTH
Masters & Alternators	ON
P Pitch (2)	FINE
F Fuel Selector (2)	ON
Flaps	Checked & UP
I Instruments	Left to Right Checked
	DG Aligned & HDG Set
	ALT Set
Oil Temperature	GREEN
Throttle (2)	1500 RPM
Pitch (2)	Feather Check, One at a Time
Check LH Engine First	
Throttle	2000 RPM
S Switches – Magnetos	L – BOTH – R – BOTH
	Max Drop 175 RPM Each
	Max Diff 50 RPM Between
Carby Heat	On, Check for RPM Drop, OFF

5. PRE-TAKE-OFF (continued)	
Pitch	Cycle 3 Times:
	RPM ↓
	MAP ↑
	Oil P's ↓
Throttle	1500 RPM
Repeat for RH Engine Run-Ups	
Throttle (2)	IDLE & Checked
	1000 RPM
Annunciator Panel	Tested
C Circuit Breakers	Checked
Controls	Correct, Full & Free
H Hatches & Harnesses	Secured
T.O.S.B. & Taxi Call	

6. LINE-UP	
F Fuel Pump (2)	ON
Flaps	UP
A Avionics	Set Current & Next Frequencies
S Switches & Lights	Magnetos – BOTH
	Anti-Collision – ON for entering RWY
	Landing – ON for T/O
T Transponder	Set ALT when entering RWY
Trim	Checked
Oil T's	GREEN
Pitot Heat	As Required
Hatches & Harnesses	Secured

7. AFTER TAKE-OFF	
Positive ROC	
Gear	UP
300 FT	
Flaps	UP
Lights	Landing - OFF
Safe ALT	
Fuel Pump (2)	OFF

8. PRE-LANDING		
B	Brakes	OFF & Operating
O	Oil T's & P's	GREEN
U	Undercarriage	Gear Warning Tested
		DOWN, 3 GREENS
M	Mixture (2)	RICH
	Magnetos	BOTH
	Masters & Alternators	ON
F	Fuel Selector	ON
	Fuel Quantities	Checked & Sufficient
A	Autopilot	Disengaged
H	Hatches & Harnesses	Secured
L	Lights	Landing - ON

9. SHORT FINAL		
C	Carby Heat (2)	OFF
P	Pitch (2)	FINE
U	Undercarriage	3 GREENS
F	Flaps	As Required
	Rudder Trim	Neutral

10. AFTER LANDING		
F	Fuel Pump (2)	OFF
	Flaps	UP
A	Avionics	Set Current Frequency & Taxi Call
S	Switches	Landing – OFF
		Anti-Collision – OFF / ON if crossing RWY
T	Transponder	Checked Code & STBY
	Trim	Set for T/O
	Pitot Heat	OFF
	Cowl Flap (2)	Open

11. SHUTDOWN		
	Park Brake	ON
	Throttle (2)	IDLE, for 2 min
	Avionics	OFF
	Magnetos (2)	L – BOTH – R – BOTH, One at a Time
	Mixture (2)	ICO
	Magnetos (2)	OFF
	Flight Times	Checked
	Masters & Alternators	OFF
	Switches	All OFF



ABNORMAL CHECKLIST



ELECTRICAL FAILURE	
ALT annunciator light illuminated	
Ammeter	Check
If one ammeter shows zero	
ALT Switch (affected side)	OFF
Electrical Loads	Reduce
ALT Circuit Breaker	Check & Reset
ALT Switch (affected side)	ON
If power is not restored	
ALT Switch (affected side)	OFF
Electrical Loads	60 amps max
If both ammeters show zero	
ALT Switches	OFF
Electrical Loads	Reduce
ALT Circuit Breaker	Check & Reset
ALT Switch (showing least, not zero)	ON
Electrical Loads	60 amps max

GYRO SUCTION FAILURE	
RPM	2700 RPM
ALT	Descend to maintain 4.5 in. Hg.

FUEL MANAGEMENT – ENGINE INOP	
Fuel Selector (operating engine)	ON or CROSSFEED
Fuel Selector (inop engine)	OFF
Fuel Pump	OFF

PROPELLER OVERSPEED	
Throttle	Retard
Oil Pressure	Check
Pitch	Reduce
IAS	Reduce

EMERGENCY CHECKLIST



ENGINE FAILURE DURING TAKE-OFF	
Throttle	IDLE
Brakes	Applied
ATC	Informed
Masters & Alternators	OFF
Fuel Selectors	OFF

ENGINE FAILURE DURING FLIGHT & ENGINE SHUTDOWN	
Rudder	Maintain Directional Control
Mixture (2)	RICH
Pitch (2)	FINE
Throttle (2)	Max
Flap	Retract
Gear	Retract
Throttle (affected side)	Retard to identify
If time permits, follow 'ENGINE TROUBLESHOOTING' first	
Pitch (affected side)	Feather, before RPM drops below 950
Mixture (affected side)	ICO
Trim	As required

ENGINE TROUBLESHOOTING	
Fuel Selector	ON
Carby Heat	ON
Primer	Locked
Mixture	As required
Fuel Pump	ON
Magnetos	Left or Right only
If not successful, continue with 'ENGINE SHUTDOWN'	

SECURING DEAD ENGINE

Fuel Pump	OFF
Magnetos	OFF
Cowl Flaps	Close
Masters & Alternators	OFF
Electrical Load	Reduce
Fuel Selector	OFF
Starter	Engaged

ENGINE RESTART

Fuel Selector	ON
Fuel Pump	ON
Pitch	Cruise RPM position
Mixture	RICH
Throttle	Two Full Strokes, then ¼ "
Magnetos	ON
Starter	Engage until prop windmills
Throttle	Reduce until engine is warm
Alternator	ON

ENGINE FIRE IN-FLIGHT / AFTER TAKE-OFF

Fuel Selector (affected side)	OFF
Throttle (affected side)	OFF
Pitch (affected side)	Feather
Mixture (affected side)	ICO
Cowl Flap (affected side)	Open
Land ASAP	

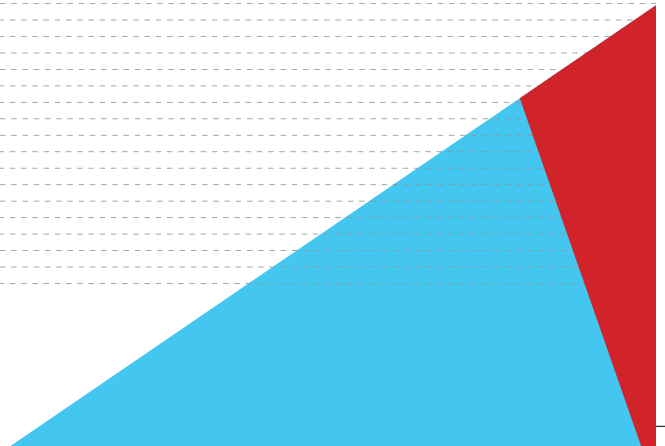
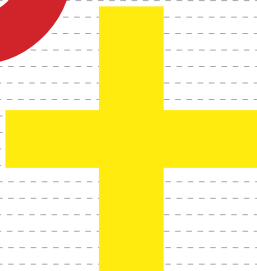
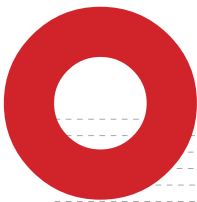
ENGINE FIRE ON GROUND

Mixture (2)	ICO
Throttle (2)	Max
Starter	Crank

DOOR OPEN	
IAS	82 KTS
Cabin Vents	Close
Storm Window	Open
Latches	Secure

MANUAL GEAR EXTENSION	
IAS	< 100 KTS
Landing Gear	DOWN
Emergency Gear Extension	Pull
Landing Gear Lights	Check GREEN

LANDING GEAR UNSAFE WARNING	
Landing Gear	Recycle
Circuit Breakers	Check
Masters & Alternators	ON
Nav Lights	OFF
If not successful, continue with 'MANUAL GEAR EXTENSION'	





LEARN TO FLY

22-24 Northern Ave,
Moorabbin Airport VIC 3194