

Gunnedah Aero Club

Pilot Training

**PA 28/181
CHECKLIST**

How to use the checklist.

Conduct the checks up to (but not including the start) by memory. Then, use the checklist to confirm the checks were completed.

Do all the checks up to (but not including the lineup checks) by memory. Confirm by checklist

There are many techniques used to assist with doing the checks from memory. One such is the 'left to right' and then 'up and down'. The preferred method for the pre-takeoff checks by the GAC is by the use of the acronym TMPFFF ICHW&T (pronounced 'Tee eM Pee triple F').

Trim	Trims set (including rudder)
Mixture	Rich
Pitch	Fully fine
Fuel	On correct tank, & sufficient
Flaps	Up - indicator and visually
Friction Nut	Set
Instruments	Left to Right
Controls Hatches &Harness	Full and free and in the correct sense. Latched and Tight
Wind and traffic	Assess

All airborne checks - by memory

BEFORE LEAVING FLYING SCHOOL

FITNESS.....	Fit To Fly? Currency/Licence Self Brief WX & Notams
FLIGHT PLAN/NOTE.....	Submitted
PASSENGER DETAILS.....	Who knows who is on board
WEIGHT & BALANCE.....	Within Limits
Fuel Arrangements.....	Organised
AUTHORISATION.....	Obtained & Signed

COPY OF FLIGHT PLAN / PAX DETAILS / WEIGHT & BALANCE TO BE LEFT WITH Club – as applicable

BEFORE ENTERING AIRCRAFT

Ensure that the aircraft is not parked on gravel, or in a difficult or unsafe area for starting/taxying.

PRE-FLIGHT INSPECTION (must also include):

OIL.....	Minimum 6 Qts Maximum 8 Qts
FUEL.....	Sufficient Quantity Checked for contaminants
TYRES.....	Checked
OLEO.....	Cleaned
PROPELLER.....	Condition Checked
WINDSCREEN.....	Cleaned (use chamois and water)
TIE DOWNS.....	Removed

PITOT/STATIC COVER.....	Removed
CONTROL LOCK.....	Removed
MAINTENANCE RELEASE.....	Valid / signed/no unserviceabilities
VDO / TACHO.....	Times Recorded
FLIGHT MANUAL.....	Stowed

PASSENGER BRIEF

TO INCLUDE THE LOCATION AND OPERATION OF:

- *SEAT BELTS - DOOR
- *EMERGENCY EXITS
- *FIRE EXTINGUISHER
- *NO SMOKING
- *NOT TO MANIPULATE CONTROLS
- *USE OF MOBILE PHONES

PRE-START CHECKS

BRAKES.....	On
FUEL	Select L or R tank
TRIM	CHECK RANGE- SET
CONTROL LOCK.....	REMOVED
SEATS / HARNESSES.....	Adjusted & Secure
RADIO / NAVAIDS.....	Off
CIRCUIT BREAKERS.....	Checked
MIXTURE.....	Full Rich
MASTER	On
BEACON / ANTI-COLLISION.....	On
NAVIGATION LIGHTS.....	On (if appropriate)
FUEL PUMP	On to press. Line then off
PRIME.....	As Required
THROTTLE.....	Set
CLEAR BEHIND.....	Check
CLEAR PROP.....	Check - CALL
IGNITION SWITCH.....	Start

AFTER START CHECKS

BRAKES.....	Holding
THROTTLE.....	Set to 1000RPM
PRESSURE.....	Oil press. (30 sec)
SUCTION.....	Indicating
AMPS.....	Check Alternator Charging
FUEL PUMP	Off
FLAPS.....	Up

ENUNCIATOR PANEL	Check
FLIGHT INSTRUMENTS	Checked
RADIO/NAVAIDS.....	
Tuned/Identified/tested	
EINGINE INSTRUMENTS	Checked
ATIS.....	Obtained
RADIO CALL.....	As Applicable

TAXI CHECKS

BRAKES.....	Check
STEERING.....	Check
GYRO CHECKS	
LEFT TURN.....	Turn Left Skid Right
	Al's Erect Wings Level
	DI decreasing
	Compass following
	Nav aids tracking
RIGHT TURN.....	Turn Right Skid Left
	Al's Erect Wings Level
	DI increasing
	Compass following
	Nav aids tracking

RUN UP

BRAKES.....	On
CHANGE TANKS.....	
ENGINE TEMPERATURE.....	Green Arc
MIXTURE.....	Full Rich
INCREASE POWER	Note Oil Pressure
THROTTLE.....	1700 RPM
BRAKES.....	Holding
MAGNETOS.....	Check Right and Left

CARB HEAT	Check
FUEL PUMP	On
FUEL PRESSURE	Check
FUEL PUMP	Off
OIL PRESSURE & TEMP.....	Check
AMMETER	Check
SUCTION	Check
CHECK IDLE RPM	600-800 RPM
THROTTLE	1000 RPM

PRE TAKE - OFF CHECKS

FUEL.....	On Correct tank Check Contents
CIRCUIT BREAKERS.....	Checked
FLAPS.....	Set
TRIM.....	Take-off
THROTTLE	Check Friction
MIXTURE	Rich
PRIMER	In & Locked
ENGINE INSTRUMENTS.....	Check
ALTIMETER	Check within 75 ft
FLIGHT INSTRUMENTS	Checked & Set
NAV INSTRUMENTS.....	Checked
CONTROLS	Full/free/correct sense
HARNESSES	Secure
Hatches	Closed/top & bottom

PRE TAKE-OFF SAFETY & DEPARTURE BRIEF

LINE UP CHECKS

LANDING LIGHT	On
TRANSPONDER.....	On
FUEL PUMP.....	ON
DI ALIGNMENT.....	Check

RWY CLEARANCE.....	Reviewed
WINDSOCK.....	Checked

PERFORMANCE CHECKS

MINIMUM TAKE-OFF RPM.....	2275 RPM
OIL TEMP. & PRESSURE	Checked
AIRSPEED	'ALIVE'

AFTER TAKE-OFF CHECKS

CLIMB SPEED.....	80 KIAS
FLAPS.....	Check Up
ENGINES T's & P's.....	Green Arc
500 FEET A.G.L.	Landing Light Off
FUEL PUMP	Off

CRUISE

POWER	Set Cruise
TEMPS. & PRESSURE	Check
MIXTURE	Lean
D.I.	Check/align
FUEL	Check contents
TREND	Monitor
	Instruments
DESCENT POINT.....	Plan

DESCENT

APPROACH	Review
NAV. AIDS	Set-
	Audio on for Instrument Approach
ENGINE INSTRUMENTS	Check
FUEL	Check
MIXTURE	Enrichen
D.I.	Check/align
QNH	Set
RUNWAY LIGHTS	On

APPROACH BRIEF

PRE-LANDING CHECKS

BRAKES.....	Off/Check
	Pressure
UNDER CARRIAGE	Down & Locked
MIXTURE.....	Full Rich

PA 28/Archer II

FUEL	On correct tank
INSTRUMENTS	Align Di / Compass
SWITCHES	Mags/both
LANDING LIGHT	On
HATCHES / HARNESSSES	Secure
Wind and Traffic.....	Check

BASE

CARB. HEAT As required
COMMENCE APPROACH Power & Flap as required

FINAL

Pitch.....Max
Undercarriage.....Down 3 Green
Carby HeatOff
Flaps..... As Required

AFTER LANDING CHECKS

When Clear of runway

TRANSPONDER Off
FUEL PUMP Off
LANDING LIGHT..... Off
PITOT HEAT Off
FLAPS..... Identified / Up
TRIM..... Neutral

SHUT DOWN CHECKS

RPM..... Set to 1000 RPM
RADIO / NAVAIDS..... Off
MAGNETOS Dead Cut
MIXTURE..... Idle Cut Off
THROTTLE..... Closed
BEACON / ANTI-COLLISION..... Beacon On
MAGNETOS..... Off
MASTER SWITCH..... Off

POST FLIGHT INSPECTION

VDO/TACHO	Times recorded
CONTROLS	Secured
PITOT COVER	Fitted
OLEO	Clean & Check
PROPELLER	Condition check
AIRCRAFT	Tied down

RETURN KEYS & MAINTENANCE RELEASE TO CLUB

PRE-STALL CHECKS

HEIGHT.....	Sufficient
AIRFRAME.....	Flaps Up
SECURITY.....	Harness Tight
	No Loose Objects
ENGINE.....	Check
	Temperatures
	And Pressures
LOCATION.....	Training
	area/landing
	field in sight
LOOKOUT	360 deg./90 deg.
	After each stall

EMERGENCY PROCEDURES

AIRSPEEDS FOR EMERGENCY OPERATION

TAKE OFF SAFETY SPEED.....	60 KIAS
ENGINE FAILURE AFTER TAKE -OFF.....	65 KIAS
MANOEUVRING SPEED (Max Weight).....	104 KIAS
MAXIMUM GLIDE.....	75 KIAS
PRECAUTIONARY LANDING WITH POWER.....	70 KIAS
LANDING WITHOUT ENGINE POWER:	
FLAPS UP.....	75KIAS
FLAP DOWN.....	70 KIAS

ENGINE FIRE DURING START-UP

STARTER.....	Crank Engine
MIXTURE.....	Idle Cut Off
FUEL PUMP	Off
THROTTLE.....	Open
FUEL SELECTOR.....	Off

ABANDON IF FIRE CONTINUES

FIRE IN FLIGHT

CHECK SOURCE OF FIRE

ELECTRICAL FIRE (smoke in cabin)

MASTER SWITCH.....	Off
VENTS.....	Open
CABIN HEAT.....	Off

LAND AS SOON AS PRACTICABLE

ENGINE FIRE

FUEL SELECTOR.....	Off
THROTTLE.....	Closed
MIXTURE.....	Idle Cut Off
FUEL PUMP	Off
CABIN HEAT.....	Off

PROCEED WITH FORCED LANDING PROCEDURES

LOSS OF OIL PRESSURE

CROSS CHECK TEMPERATURE
LAND AS SOON AS POSSIBLE AND INVESTIGATE CAUSE
PREPARE FOR POWER OFF LANDING.

ENGINE FAILURES

DURING TAKE-OFF RUN

THROTTLE.....	Idle
BRAKES.....	Apply Evenly

IMMEDIATELY AFTER TAKE-OFF

LOWER NOSE TO MAINTAIN AIRSPEED - 70kts
FULL FLAP AND LAND ON REMAINING RUNWAY

NO RUNWAY REMAINING

SELECT MOST SUITABLE FIELD 30° EITHER SIDE OF NOSE
AIRSPEED..... 75 KIAS
FUEL..... Check/Change

MIXTURE..... Rich
FUEL PUMP Check On
CARB. HEAT On

If Engine does not restart

FUEL Off
MIXTURE..... Lean
FUEL PUMP Off
THROTTLE..... Idle
MAGS..... Off
MASTER Off
FLAPS..... As
Required

DURING FLIGHT

VITAL ACTIONS

SET ATTITUDE AND TRIM FOR BEST GLIDE SPEED 75 kts

CARB. HEAT..... Hot
THROTTLE..... Full
MIXTURE..... Full Rich
FUELVALVE.....
Check/change
FUEL PUMP On

SHUTDOWN CHECKS

BRAKES.....	Off
SWITCHES.....	Off
MASTER	Off
HATCHES.....	As required
HARNESSES	Secure
FUEL SELECTOR.....	Off

COMMUNICATION FAILURE

CORRECT FREQUENCYCheck
SQWARK CODE 7600

THEN:

Check:

1. Alternator ON
 2. Avionics Master ON
 3. Microphone plug fully in
 4. Volume turned down
 5. Audio selector on phones
 6. Swap headphones
 7. Swap jacks (need use other side PTT though)
- TRY AN ALTERNATIVE FREQUENCY IF AVAILABLE, OR REVERT TO THE PREVIOUS FREQUENCY IN USE
 - REQUEST ANOTHER AIRCRAFT TO RELAY
 - TRY ANOTHER GROUND STATION

RADIO FREQUENCIES

TAMWORTH	ATIS	123.80	116.0 VOR
TAMWORTH TOWER		118.25	SOUTHERN CIRCUIT
		119.40	NORTHERN CIRCUIT
TAMWORTH GROUND		121.90	
TAMWORTH	VOR	116.00	
TAMWORTH	NDB	341	
TAMWORTH MBZ (after Hrs)		119.40	
AREA FREQUENCY IN TRAINING AREA		127.10	
GUNNEDAH	CTAF	127.40	
GUNNEDAH	NDB	407	
QUIRINDI	CTAF	127.80	
QUIRINDI	NDB	386	

TRANSPONDER CODES

CTA	3000
OCTA	1200
Communication Failure	7600
EMERGENCY	7700

NOTES