

CONSOLIDATED PBY-5A CATALINA 9767

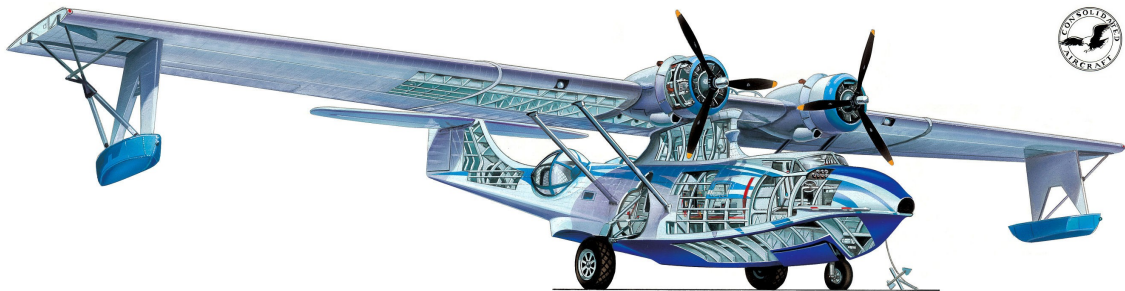


Check List

Warning :

This document is intended for simulation purpose
only.

Not for real use



BEFORE BOARDING AIRCRAFT

No external damage to airframe.
No evidence of fuel, oil or hydraulic leaks.
No evidence of water leaking from hull.
Forward end of N/W doors free from lock-pin scratches.
N/W external lock-plate removed.
N/W doors firm Check, for loose hinges, etc.
Check oleo leg extensions Minimum 2"
Tires not damaged - check pressure Minimum 50 lb/psi
Main gear external lock pins removed.
Fuel sumps drained.
Upper surface of wing checked for damage.
Antennae visually checked for security.
Oil tanks checked Minimum for take-off is 30 gals.
Fuel tanks dipped.
Hydraulic tank check for fluid.
Inspect condition of cowl gill brackets and bolts.
Pitot and windshield covers - remove.
Hull & float drain plugs in (number: 8)
Remove external control locks.
Stow and secure U/C locks, fuel dipstick, ropes, etc.

AFTER BOARDING AIRCRAFT

Before Boarding Aircraft Check	Completed
Entrance doors (2), hatches and blisters	Secure
Check bilges for water and pumps for action	Checked
Ship papers	Aboard
Flight documentation	Aboard
External control locks (5)	Aboard
External undercarriage locks (3)	Aboard
Boarding ladder	Stowed
Float crank	Stowed
Down-latch rod	Stowed
Nose-gear ratchet handle	Stowed
Emergency gear (survival & life jackets)	Aboard
Life raft (if carried)	Aboard
Dipstick	Aboard
Static source (2)	Normal
Passengers safety briefing	Completed

PRE-START

Landing gear	Selected down
Fuel	Left on left / right on right
Mixture	ICO
Trims	Checked and set
Propeller pitch	Full fine
Throttle	1/10 Open
Ignition master	On
Magnetos	Off
Master radio	Off
Master	On - Voltage checked
Fire warning	Test
Seat belt / No smoking	On
Carb. Heat	Cold
Cowl gills	Open
Brakes & Wheel chocks	Set (Hyd. press 850 psi, mini.)
Anticollision light	On

START

Note manifold pressure before starting engine (The field barometric pressure is used as a reference in subsequent power and magneto checks)

Fuel boost pump on.

Motor engine over with direct drive starter. (Ensure that propeller is turning smoothly if any sign of hesitation or stoppage disengage starter, turn off boost pump and investigate)

After 12 blades, turn magneto switch to Both and continue turning engine.

Prime as required. When engine starts firing, ease mixture control out of ICO to Auto Rich.
Prime as required - run engine at approximately 800 rpm.

***IF NO OIL PRESSURE WITHIN 15 SECONDS
STOP ENGINE WITH ICO & INVESTIGATE.***

Switch boost pump off and warm engine up at approximately 800 rpm.

NOTE: When engine is running smoothly repeat starting process with other engine.

AFTER START

Suction	3.75" hg
Master radios	On and tested
Carb. Heat	Checked

NOTE: Check instruments while taxiing

RUN UP

Brakes	Set (Hyd. press 850 psi, mini.) (on water ensure area is clear)
Oil temp. minimum	40°C
Cyl. Head temp. minimum	100°C
Fuel press. (boost pumps "Off")	Minimum 14 p psi
Pitch	Full fine
Live mags.	Check at idle rpm
Run up engine to 1700 rpm	Exercise prop. and note generator action Check feathering action and note gen. charge rate Open throttle to station barometric pressure Note rpm and check mags. - max. drop 80 rpm Throttle back to idle and repeat with other engine

***NOTE: Power check at station pressure give 2200 rpm.
Reading less than 2150 rpm should be reported to the AME.***

NOTE : Due to an X-Plane limitation, you cannot check feathering action on the ground

BEFORE TAKE-OFF (LAND)

Controls	Free
Magnetos	Both left / Both right
Carb. Heat	Off
Cowl gills	As required
Pitch	Full fine
Oil	Press and Temp OK (60°c mini.)
Generators	On & checked
Fuel	Left on left / Right on right, “ <i>Endurance is ...hr</i> ”
Mixture	Auto-Rich
Boost pumps	On, pressure checked
Cylinders Head Temp	100°c to 200°c
Hatches and doors	Closed and secured
Harness	Secured
Trims	Set
Landing lights / Strobe	On
Pitot Heat	On
Briefing	Completed

NOTE: Check DG reading and magnetic compass against runway heading

BEFORE TAKE-OFF (SEA)

Wheels	Raised , up-locks fully engaged
Nose-wheel doors	Fully closed, lock pins and block engaged
Vent air scoop	Closed
Controls	Free
Magnetos	Both left / Both right
Carb. Heat	Off
Cowl gills	As required
Pitch	Full fine
Oil	Press and Temp OK (60°c mini.)
Generators	On & checked
Fuel	Left on left / Right on right, “ <i>Endurance is ...hr</i> ”
Mixture	Auto-Rich
Boost pumps	On, pressure checked
Cylinders Head Temp	100°c to 200°c
Hatches and doors	Closed and secured
Harness	Secured
Trims	Set
Landing lights / Strobe	On
Pitot Heat	On
Briefing	Completed

TAKE-OFF

48" 2700 rpm - Without Delay -	1 minute maxi (Land) 2 minutes maxi (Sea)
Lift nose wheel	65 / 70 kt increase to 90 kt climb speed
ON CAPTAIN REQUEST :	1st reduction 41" 2500 rpm (maxi continuous power) 2nd reduction 36" 2300 rpm (climb power)

AFTER TAKE-OFF

Landing gear / floats	Up
Boost pumps	Off
Landing lights	Off
Seat belt / No smoking	At discretion
Engine Nacelles	Checked

IN FLIGHT

CRUISE	29" 2050 rpm / Auto Lean - for short range (for extended flights use power charts)
ENROUTE CLIMB	31" 2050 rpm / Auto Rich
AVOID	1700 / 1850 rpm

BEFORE LANDING (LAND)

Wheels - lowered and all down -	locks checked
Hydraulic pressure	800-1000 psi
Brakes	Tested
Mixture	Auto-Rich
Carb. Heat	On
Cowl gills	As required
Boost pumps	On
Landing lights	On
Seat Belt / No Smoking	On
RPM (just before touchdown)	Full fine

BEFORE LANDING (SEA)

CHECK FOR SUITABLE WATER LANDING AREA:

WAVES 0,6 m MAXI, NO SWELL

LOOK OUT CAREFULLY FOR THE PRESENCE OF:

SHALLOW WATER, SHOALS, SUBMERGED ROCKS, FLOATING DEBRIS

SERIOUS VISUAL CHECK COMPULSORY:

Wheels	RAISED & ALL UP-LOCKS FULLY ENGAGED
Nose-wheel doors	FULLY CLOSED, LOCK PINS & BLOCK ENGAGED
Wing tip floats	Lowered
Mixture	Auto-Rich
Carb. Heat	On
Cowl gills	As required
Boost pumps	On
Landing lights	On
Seat Belt / No Smoking	On
RPM (just before touchdown)	Full fine
Mixture	Auto-Rich

NOTE: FOR WATER LANDINGS, YOU HAVE TO GET THE APPROPRIATE TOUCHDOWN ANGLE OF ATTACK

IN CASE OF PORPOISING: TAKE OFF POWER AND GET THE AIRCRAFT BACK IN THE AIR IN A SEMI-STALLED CONDITION (best one)

OR: THROTTLES CLOSED, WHEEL FULLY BACK (not recommended)

AFTER LANDING

Cowl gills	Open
Fuel boost pump	Off
Carb. Heat	Off
Landing lights/Strobe	Off
Pitot Heat	Off
Rudder Lock	On

SHUT DOWN

Park brake	check
At idle rpm check both engines for live mags.	
Park brakes	Set
Seat Belt/No smoking	Off
Master radio	Off
Generators	Off
Stop engines by ICO	(note slight rise in rpm before engines stop)
Beacon and Nav. Lights	Off
Ignition master and mag. Switches	Off
Cowl gills	Closed
Master	Off
Fuel selectors	Off
Control wheel lock yoke	Installed
Chocks	in place
Park brake	released

EMERGENCY CHECK LIST

ENGINE FAILURE (TAKE OFF)

Speed less than VMCA 85 kt :	Throttles back , land straight ahead
Speed above VMCA 85 kt :	
Failed engine	Feather
Gear / Floats	Up
Power	41" 2500 rpm
Boost pump	Off
Fuel shut off valve	Closed
Ignition	Off
Generator	Off
Cowl gills	Closed

FEATHER

Throttle	Pull back
Pitch	Pull back
Mixture	Idle cut off
Feather button	Confirm / Push

ENGINE FAILURE (CRUISE)

Use check list "ENGINE FAILURE (TAKE OFF)" above **Minimum Control speed in flight** (VMCA), with power setting at captain discretion

EMERGENCY CHECK LIST

PROPELLER RUNAWAY

Speed	Reduce
Throttle affected	Pull back
Pitch affected	Pull back

If no effect :

Feather button	Confirm / Push
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If no effect :

Engine affected	Idle cut off
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Perform engine failure check list

Land as soon as possible

EMERGENCY CHECK LIST

RESTARTING ENGINE IN FLIGHT

Mixture	Idle cut off
Fuel shut off valve	Open
Boost pump	On
Ignition	Both
Throttle	Set
Pitch	Full forward
Feather button	Confirm / Push & hold
Mixture	Auto rich when engine is turning
@ 800 rpm	Release feather button
Power settings	Adjust

EMERGENCY CHECK LIST

ENGINE FIRE

Increase speed above 85 kt	
Engine in fire	Feather
Gear / Floats	Up
Power	41" 2500 rpm or captain discretion
Boost pump	Off
Fuel shut off valve	Closed
Ignition	Off
Generator	Off
Cowl gills	Closed
Firewall shut off valve	Closed
Fire extinguisher	Select / Confirm / Pull

FEATHER

Throttle	Pull back
Pitch	Pull back
Mixture	Idle cut off
Feather button	Confirm / Push