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6146 AF ADV GP

CONDENSED CHECKLIST

C-47B & D

EMERGENCY PROCEDURES

C-47 & C-117 SERIES EMERGENCY CONDENSED CHECK LIST

ENGINE FAILURE DURING TAKE-OFF

After reaching Decision Speed

Maintain Control and Airspeed

1. Hydraulic pump selector - To operative engine.
2. Landing gear - UP (when airborne).
3. If there are no obstacles, accelerate to 102 to 108 mph (89 to 94 knots) IAS.
4. Wing flaps - UP.
5. Skis (if installed) - DOWN.

Shutdown

1. Throttle - CLOSE (if fire does not exist).
2. Propeller - Feather.
3. Mixture control - IDLE CUT-OFF.
4. Firewall shutoff valve handle - PULL TO CLOSE.
5. Fire extinguisher switch - Discharge agent if fire exists.
6. Carburetor de-icer alcohol - OFF.
7. Propeller de-icer alcohol - OFF.
8. Ignition switch - OFF.
9. Fuel booster pump switch - OFF.
10. Cowl flaps - As required.

Clean-Up

1. Fuel tank selector - OFF.
2. Trim - As required.
3. Propeller control - DECREASE RPM.
4. Generator switch - OFF.

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CONDENSED CHECK LIST (Continued)

5. Oxygen - As required.
6. Skis (if installed) - UP.
7. Wing flap, landing gear, and ski controls - NEUTRAL.

ENGINE FAILURE/FIRE DURING FLIGHT

Maintain Control and Airspeed

1. Mixture controls - AUTO RICH.
2. Propeller controls - Full INCREASE RPM.
3. Throttles - As required to maintain safe airspeed and directional control.
4. Hydraulic pump selector - To operative engine.
5. Landing gear - UP.
6. Wing flaps - UP.
7. Skis (if installed) - DOWN.

Shutdown

1. Throttle - CLOSE (if fire does not exist).
2. Propeller - Feather.
3. Mixture control - IDLE CUT-OFF.
4. Firewall shutoff valve handle - PULL TO CLOSE.
5. Fire extinguisher switch - Discharge agent if fire exists.
6. Carburetor de-icer alcohol - OFF.
7. Propeller de-icer alcohol - OFF.
8. Ignition switch - OFF.
9. Fuel booster pump switch - OFF.
10. Cowl flaps - As required.

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Clean-Up

1. Fuel tank selector - OFF.
2. Trim - As required.
3. Propeller control - DECREASE RPM.
4. Generator switch - OFF.
5. Oxygen - As required.
6. Skis (if installed) - UP.
7. Wing flap, landing gear, and ski controls - NEUTRAL.

ENGINE RESTART DURING FLIGHT

1. Reduce airspeed to 135 mph (117 knots) IAS, or below.
2. Skis (if installed) - DOWN.
3. Firewall shutoff valve handle - PUSH TO OPEN.
4. Turn propeller 8 blades with starter before unfeathering.
5. Fuel tank selector - As required.
6. Carburetor air - RAM.
7. Throttle - CLOSE.
8. Propeller control - DECREASE RPM.
9. Ignition switch - BOTH.
10. Fuel booster pump switch - ON.
11. Propeller feathering button - Push IN (until 800-1000 RPM) then release and allow governor to take over.
12. Mixture control - AUTO RICH.
13. Warm engine thoroughly, then increase power to desired settings.
14. Generator switch - ON.
15. Fuel booster pump switch - OFF.
16. Skis (if installed) - UP.
17. Trim - As required.

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EMERGENCY
CONDENSED CHECK LIST (Continued)**

SINGLE - ENGINE LANDING

Single-engine landings are made in the same way as normal power-off landings except for the following:

1. Maintain a final approach airspeed approximately 10 mph IAS faster than normal.
2. Do not lower the landing gear until final approach, and until landing is assured.
3. Do not use more than "one-half down" wing flaps until landing is assured.
4. Maintain a higher than normal altitude on final approach until landing is assured. When landing is assured, close throttle for the operating engine, retrim aircraft, full flaps (if desired), and execute a normal power-off landing.

CAUTION: Never allow the airspeed to drop below minimum control speed before a power-off landing is assured and all possibilities of a go-around have been eliminated; however, due to the decreased drag of the feathered propeller, caution should be exercised to prevent overshooting.

SINGLE - ENGINE GO-AROUND

If it becomes necessary to make a single-engine go-around, use the following procedure.

1. Give the command, "Go around," to co-pilot.
2. Open the throttle to maximum power.
3. The co-pilot will position the flaps at $\frac{1}{4}$ at the command "Go around," provided $\frac{1}{4}$ or more flaps were extended at time of decision to go around.

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4. As soon as the pilot determines that the aircraft will not be touched down, or after breaking ground if contact is made, he will direct the co-pilot to retract the landing gear.
5. After the aircraft has reached single-engine climb airspeed (102 to 108 mph or 89 to 94 knots), the pilot will direct the co-pilot to retract the remaining $\frac{1}{4}$ flaps.

NOTE: Single-engine climb speed should be attained without gaining altitude and, if necessary and feasible, sacrifice a little altitude to attain the single-engine climb speed as safely and quickly as possible.

6. Reduce power to normal rated, if practicable, and continue climb-out.

CAUTION: CHT should not exceed limits during any phase of single-engine operation. If full OPEN cowl flaps do not provide adequate cooling, use a higher airspeed.

PROPELLER FAILURE

ENGINE HUNTING OR SURGING

To correct the hunting or surging of an engine and to bring it back into synchronization, use the following procedure:

1. After reaching a safe altitude, decrease rpm on both engines to between 1600 and 1800.
2. Check fuel pressure and supply; change to another tank and turn the fuel booster pump ON.

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CONDENSED CHECK LIST (Continued)

3. Adjust the propeller control of the malfunctioning propeller to INCR RPM and then DECR RPM three or four times.
4. If the malfunction has not been corrected, and the hunting and surging is excessive, feather according to the procedure listed under Engine Failure During Flight.

CAUTION: The propeller feathering circuits are not protected. If the feathering action does not occur within 90 seconds, pull out the feathering button.

PROPELLER FAILURE TO FEATHER

If a propeller fails to completely feather and is still windmilling, open the firewall shut-off valve to supply oil to the engine, after making sure no fire hazard exists.

PROPELLER OVERSPEEDING

If an engine overspeeds (runaway propeller), indicating that the propeller governor is not functioning to reduce rpm properly, use the following procedure:

1. Close the throttle.
2. Propeller control - DECREASE RPM.
3. Push the feathering button for the affected propeller - IN, and reduce the airspeed to 120 to 130 mph (104 to 113 knots) IAS. When the rpm drops below governor rpm, pull out on the feathering button. If the governor does not hold after two or three attempts, feather the propeller and complete the engine shutdown according to the procedure listed under Engine Failure During Flight.

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NOTE: If the propeller controls are inactive, the governor is spring loaded so that it is positioned to a predetermined rpm setting.

Overspeeding sometimes occurs after a fuel tank has been run dry, or while changing fuel supply from one tank to another, with the usual result of a momentary power loss that is followed by the return to full power. When this occurs, use the following procedure:

1. Close the throttle.
2. Mixture control - AUTO RICH.
3. Change the fuel tank selector to the fullest tank (if switching from a dry tank).
4. Fuel booster pump switch - ON.
5. If the engine continues to overspeed, apply the first procedure.

FIRE

ENGINE FIRE ON THE GROUND

If an induction fire occurs during an engine start, proceed as follows:

1. Mixture control - IDLE CUT-OFF and keep the engine turning with the starter.
2. Throttle - OPEN.
3. Ignition switch - OFF.
4. Fuel booster pump switch - OFF.
5. Fuel tank selector valve - OFF.
6. Firewall shutoff valve handle - PULL TO CLOSE.

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EMERGENCY
CONDENSED CHECK LIST (Continued)

7. Signal ground standby crew to combat the fire.
8. If the ground crew is not successful in extinguishing the fire, discharge the engine fire extinguisher.
9. Stop the other engine (if Operating).
10. Evacuate the aircraft.
11. Do not restart the affected engine after the engine fire extinguisher has been discharged.

ENGINE FIRE IN FLIGHT. - This procedure is covered starting on page two.

FUSELAGE FIRE

When a fire occurs in flight, regardless of type or location, all crew members and passengers should be instructed immediately to put on their parachutes and stand by in readiness to abandon the aircraft. If the fire is not extinguished, land immediately. If a landing is not feasible, bail out, altitude permitting. In case of smoke or fire in the cockpit or cabin, perform the following steps immediately, before taking any fire control action. After these preliminary steps have been taken, subsequent operations will depend upon the various types of fire, as detailed below:

1. Close all hatches, doors, and ventilating ducts. Adjust the mixing chamber controls to the full HOT positions. Turn both nacelle spill valve controls to the SPILL (dump) position.
2. Oxygen masks - ON (100% OXYGEN).

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3. Bail-out warning switch - ON to signal personnel to prepare to abandon the aircraft (see Bailout, Pilot's handbook). If alarm bell is not provided, alert the crew over interphone.
4. Combat the fire with hand fire extinguishers.

WARNING: Repeated or prolonged exposure to high concentrations of bromochloromethane (CB) or decomposition products should be avoided. CB is a narcotic agent of moderate intensity but of prolonged duration. It is considered to be less toxic than carbon tetrachloride, methyl bromide, or the less usual products of combustion. In other words, it is safer to use than previous fire extinguishing agents. However, normal precautions should be taken, including the use of oxygen when available.

WING FIRE

There are no provisions installed for combating wing fire. If the following procedure fails to extinguish the fire and a landing cannot be made immediately, abandon the aircraft.

1. Take the necessary steps to isolate the fire by shutting off any and all systems that may be feeding the fire.
2. Attempt to extinguish the fire by sideslipping the aircraft away from the fire.
3. Open the aircraft emergency exits if fire is not extinguished.

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EMERGENCY
CONDENSED CHECK LIST (Continued)**

ELECTRICAL FIRES

If smoke or fire is definitely found to be of electrical origin, and the source is discovered immediately, proceed as follows after completing the preliminary steps under Fuselage Fire.

1. Battery and generator switches - OFF.
2. Use hand fire extinguishers to combat the fire.
3. Make certain that the circuit breaker for the electrical circuit involved is tripped before restoring power. If the source of the electrical fire is not determined immediately, proceed as follows.
4. All circuit breakers - Tripped. The preceding steps have eliminated electrical power in all circuits. The following steps should be initiated progressively to determine the defective electrical circuit.
5. Generator switches (one at a time) - ON.
6. Battery switch - ON.
7. Inverter switch - ON.
8. Check circuit breakers in the main junction box.

NOTE: Watch for recurrence of smoke or fire while resetting the circuit breakers.

9. When the source of smoke or fire has been found, leave the involved circuit inoperative and restore power to the remaining circuits.

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CONDENSED CHECK LIST (Continued)**

SMOKE ELIMINATION

FLIGHT COMPARTMENT AND CABIN

Under no circumstances should any hatch or door, other than the clear vision windows and the main cabin door, be opened during an inflight fire for smoke elimination.

NOTE: The pilot's and co-pilot's clear vision windows must be opened before opening the main cabin door, to reduce smoke and flame induction.

BATTERY FUMES

If battery fumes are detected, turn the battery switch OFF and use oxygen.

CONDENSED CHECKLIST

C-47B & D

NORMAL PROCEDURES

**T.O. 1C-47B-1
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REPLACES C-47 A, B, C, D CHECKLIST 29 JUN 56 WHICH IS OBSOLETE.

KWA #1 > HL-05 / HL-06

DC-3B = 2 1830-92 P/W's

T/O 42" 2700 RPM AUTO R.

BOOST ON

climb ↑ 36" / 2350 AUTO R

BOOST OFF

Cruise → 33" / 2150 AUTO L

Props / Throttle ADJ TRIM

Decent ↓ 28" / 2150 AUTO R.

BOOST P/T CARB H

C-47 & C-117 SERIES
CONDENSED CHECK LIST — PILOT AND CO-PILOT

BEFORE EXTERIOR INSPECTION

1. DD Form 781 - Check. Check and note all write-ups and data to assist in visual check; check time of next due inspection.
2. Landing gear controls - Check.
 - a. Landing gear lever - DOWN.
 - b. Landing gear latch lever - POSITIVE LOCK.
3. Trim indicators - Zero.
4. Fuel tank selectors - OFF.
5. Battery switch - OFF.
6. Ignition switches - OFF.
7. JATO master switch (if installed) - OFF.
8. Cowl flaps - OPEN (use hydraulic hand pump if necessary).
9. Oxygen system and equipment - Check, if required.

EXTERIOR INSPECTION

In addition to the following items, the exterior inspection will include checking external areas for popped rivets, dents, wrinkles, cleanliness, security of access and inspection doors, and general condition.

1. MAIN CABIN DOORS
 - a. Emergency release pins - Fully in and safetied.
2. LEFT WING
 - a. Wing flap - Check.
 - b. Aileron control-surface lock - Remove.
 - c. Aileron and hinges - Check.
 - d. Static eliminators - Check.
 - e. Wing tip and light - Check.
 - f. Wing de-icer boots (if installed) - Check.
 - g. Landing light - Check.

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CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

3. LEFT MAIN GEAR, WHEEL WELL, ENGINE, AND PROPELLER
 - a. Exhaust stack - Check for cracks.
 - b. Hydraulic lines - Check.
 - c. Strut - Inflation.
 - d. Tire - Cuts, bruises, inflation, and slippage.
 - e. Gear safety pin - Installed and free.
 - f. Downlock mechanism - Engaged.
 - g. Wheel well - Leaks, loose or slipped cables and pulleys.
 - h. Fire extinguisher bottle - Proper charge.
 - i. Chocks - In place.
 - j. Nose section (inside cowling) - Check.
 - k. Propeller - Check dome safetied, cables, and pulleys.
 - l. Oil cooler scoop - Free of obstructions.
 - m. Cowl flaps actuating lines - Check.
4. CENTER WING AND NOSE SECTION
 - a. Fuel strainer and sumps - Drained.
 - b. Alternate static source - Check.
 - c. Antennas - Check.
 - d. Pitot heads - Covers removed, static source free.
5. RIGHT MAIN GEAR, WHEEL WELL, ENGINE, AND PROPELLER
 - a. Cowl flaps and actuating lines - Check.
 - b. Oil cooler scoop - Free of obstructions.
 - c. Propeller - Check dome safetied, cables, and pulleys.
 - d. Nose section (inside cowling) - Check.
 - e. Chocks - In place.
 - f. Fire extinguisher bottle - Proper charge.

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CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

- g. Wheel well - Leaks, loose or slipped cables and pulleys.
 - h. Downlock mechanism - Engaged.
 - i. Gear safety pin - Installed and free.
 - j. Tire - Cuts, bruises, inflation, and slippage.
 - k. Strut - Inflation.
 - l. Hydraulic lines - Check.
 - m. Exhaust stack - Check for cracks.
6. **RIGHT WING**
- a. Landing light - Check.
 - b. Wing de-icer boots (if installed) - Check.
 - c. Wing tip and light - Check.
 - d. Static eliminators - Check.
 - e. Trim tab - Neutral.
 - f. Aileron and hinges - Check.
 - g. Aileron control-surface lock - Remove.
 - h. Wing flap - Check.
 - i. Carburetor and windshield alcohol supply tank (if installed) - Check quantity, then cap and cover secured.
7. **FUSELAGE**
- a. Heater scoop (if installed) - Check.
 - b. APP outlet (if installed) - Check.
 - c. Antennas - Check.
 - d. Strut - Inflation.
 - e. Tail wheel - Check tire for cuts, bruises, inflation, and slippage.
8. **EMPENNAGE**
- a. Tail de-icer boots (if installed) - Check.
 - b. Surface control lock - Remove.
 - c. Elevator, rudder, and hinges - Check.
 - d. Static eliminators - Check.
 - e. Trim tabs - Neutral.

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CONDENSED CHECK LIST — PILOT AND CO-PILOT
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- f. Tail lights - Check.
- g. Static ground wire - Check.

INTERIOR INSPECTION

In addition to the following items, the interior inspection will include checking all circuit breaker panels, visible control cables, hydraulic lines, stowage of equipment, and the general area in all compartments.

1. TAIL COMPARTMENT

- a. Control-surface locks - Stow.
- b. Radio equipment - Check.
- c. Cables, pulleys, and brackets - Check.
- d. Lavatory - Cleaned and serviced.
- e. Hand fire extinguisher - Safetied, properly inspected, and stowed.

2. MAIN CABIN

- a. First aid kits - Sealed and stowed.
- b. APP and cabin space heater (if installed) - Check.
- c. Survival equipment (if installed) - Check.
- d. Emergency exits - Secured.
- e. Long range shutoff valves (if installed) - OFF.
- f. Fuel and oil filler covers - Secured.
- g. Cargo security - Check.
- h. Fire axe - Stowed.

3. FLIGHT COMPARTMENT

- a. First aid kits - Sealed and stowed.
- b. Nacelle spill valve control knobs (C-47 aircraft) - SPILL or as desired.
- c. Radio operator's equipment - As required.
- d. Navigator's equipment - As required.

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CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

- e. Circuit breakers - Set.
- f. Generator switches - ON.
- g. Carburetor and windshield alcohol supply (if installed in flight compartment - Check quantity.
- h. Hydraulic fluid supply - Check level.
- i. Aircraft, navigation, and communication publications - Aboard.
- j. Propeller de-icing alcohol supply tank - Check quantity.
- k. Nacelle spill valve control knobs (C-117 aircraft) - DUMP or as required.

PASSENGER BRIEFING

- 1. Roll call against manifest.
- 2. Destination, altitude, duration of flight.
- 3. Use of parachutes and survival equipment.
- 4. Safety Belts.
- 5. Alarm bell signals.
- 6. Bail-out and ditching procedures.
- 7. Air sickness and use of "Blue Room."
- 8. Movement during flight.
- 9. Smoking restrictions.
- 10. Precautions during turbulence.
- 11. Movement during ground operation.
- 12. Customs requirements at point of disembarkment.

C-47 & C-117 SERIES
CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

BEFORE STARTING ENGINES

1. Visual inspection - Completed.
2. Seat and rudder pedals - Adjusted.
3. Seat belt - Fastened.
4. Landing gear latch lever - POSITIVE LOCK.
5. Hydraulic pump selector - LEFT ENG. GYRO PILOT - RIGHT ENG. HYDR. SYS.; on modified aircraft - GYRO PILOT POSITION.
6. Autopilot emergency shutoff valve - ON.
7. Star valve - OFF.
8. Wing flap lever - NEUTRAL.
9. Hydraulic hand pump and pressure - Check.
10. Landing gear lever - NEUTRAL.
11. Fire extinguisher switches - OFF.
12. Firewall shutoff valves - OPEN (handles DOWN).
13. Autopilot - OFF.
14. Parking brake - Set.
15. Ski selector handle (if installed) - As required.
16. Radio and electrical switches - OFF.
17. Supercharger handle (if installed) - LOW BLOWER.
18. Alarm bell - Check.
19. Propellers - Clear.
20. Battery switch - ON (OFF if external power is used).
21. No smoking and fasten seat belt sign switches - As required.
22. APP (if installed) - START and on the line.

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CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

23. Lights - As required.
24. Pitot heaters - Check.
25. Propeller and windshield de-icing systems - Check as required, then OFF.
26. Ignition switches - OFF.
27. Fire detection system - Test.
28. Cowl flaps - OPEN, then OFF.
29. Static selector switch - NORMAL.
30. Fuel quantity - Check.
31. Fuel tank selectors - MAIN or fullest tanks.
32. Carburetor air - RAM.
33. Gear safety pins - Removed.
34. Chocks - In place.
35. Mixture controls - IDLE CUT-OFF.
36. Throttles - Cracked.
37. Propeller controls - Full INCREASE.
38. Manifold pressure - Check.
39. Crew and passengers - Briefed.

STARTING ENGINES

1. Propellers clear, fire guard posted.
2. Fuel booster pump switch - ON.
3. Starter switch - Engage.

NOTE: Pull prop thru 15 blades if engine has been shut down more than 2 hours, if less than 2 hours 8 blades are sufficient.

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CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

4. Ignition switch - BOTH.
5. Prime - As required.
6. Mixture control - AUTO-RICH.
7. Oil pressure - Within limits.
8. Fuel booster pump switch - OFF.
9. Fuel pressure - Within limits.
10. Throttle - Adjusted.
11. Vacuum pressure - Check.
12. De-icer pressure - Check.
13. Hydraulic system pressure - Check - Wing flaps DOWN.
14. Start the left engine repeating steps 1 through 10.
15. External power (if used) - Disconnected.
16. Battery switch - ON.

BEFORE TAXIING

1. Hydraulic pump selector - LEFT ENG. HYDR. SYS. - RIGHT ENG. GYRO PILOT; on modified aircraft - GYRO PILOT POSITION.
2. Wing flap lever - UP.
3. Hydraulic system pressure - Check.
4. Inverters - Checked and ON.
5. Radios - Checked.
6. De-icer boots - Checked, then OFF.
7. Autopilot - Checked, then OFF.

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CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

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8. Hydraulic pump selector (on modified aircraft) - TAKE-OFF POSITION.
 9. Fuel tank selectors - Check - Engines will be operated 3 minutes on each position to insure proper operation.
 10. Engine instruments - Within limits.
 11. Flight instruments - Check.
 12. Taxi clearance - Check.
 13. Chocks - Removed.
 14. Gear safety pins and pitot covers - Stowed.
 15. Doors and hatches - Secured.
 16. Interphone - Check.
 17. Ready for taxiing.

TAXIING

1. Parking brake - Released.
2. Tail wheel - UNLOCKED.
3. Brakes - Check.
4. Turn-and-slip indicator and standby compass - Check.
5. Hydraulic pressure - Monitor.

ENGINE RUNUP

1. Tail wheel - LOCK.
2. Parking brakes - Set.
3. Manifold valves - Bleed.
4. Engine instruments - Within limits.
5. Ignition grounding check (700 rpm) - Check.

C-47 & C-117 SERIES
CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

6. Propellers - Exercised.
7. Generators - Checked.
8. Propeller feathering check (1700 rpm) - Check.
9. Two-speed supercharger (if installed and operative) - Check.
10. Carburetor air and de-icer alcohol check - Check.
11. Propellers - Exercised.
12. Power and ignition check - Check.

BEFORE TAKE-OFF

1. Crew briefed and passengers checked.
2. Supercharger handle (if installed) - LOW BLOWER.
3. Wing flaps - UP.
4. Engine and flight instruments - Checked.
5. Hydraulic pressure - Within limits.
6. Cowl flaps - TRAIL.
7. Fuel tank selectors - Fullest tanks.
8. Carburetor air - RAM.
9. Mixture controls - AUTO-RICH.
10. Propeller controls - Full INCREASE.
11. Trim - As required.
12. Autopilot - OFF.
13. Flight controls - Check for free and correct movement.
14. Fuel booster pump switches - ON.
15. Take-off and landing data card - Check.

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CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

16. Windshield wipers and defrosters - As required.
17. Pitot heat - As required.
18. Anti-icers - As required.
19. Landing lights - As required.
20. Throttle friction lock - Adjusted.
21. Tail wheel - LOCKED.

CLIMB

1. Landing gear - UP (after reaching minimum single-engine speed).
2. When airspeed of 120 mph (104 knots) is reached, reduce power to normal rated.
3. Landing lights (if used) - OFF.
4. When safe altitude is reached, adjust power to 75 per cent of normal rated - (2350 RPM - 36" Hg.)
5. Cowl flaps - Adjusted.
6. Engines and fuel syphoning - Check.
7. APP (if installed) - OFF.
8. No smoking and fasten seat belt signs - OFF.

CRUISE

1. Cruise power - Set.
2. Engine instruments - Within limits.
3. Cowl flaps - As required to obtain inflight CHT.

DESCENT

1. Crew and passengers - Briefed.
2. Approach and landing data - Checked.

C-47 & C-117 SERIES
CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

3. Fuel tank selectors - Fullest tanks.
4. Trailing antenna (if installed) - In.
5. APP (if installed) - START.
6. Autopilot - OFF.
7. Hydraulic fluid level - Check.

BEFORE LANDING

1. No smoking and fasten seat belt signs - ON.
2. Mixture controls - AUTO-RICH.
3. De-icer boots - OFF.
4. Carburetor air - RAM.
5. Carburetor de-icer alcohol - As required.
6. Heaters - As required.

TRAFFIC PATTERN

1. Propeller controls - 2350 rpm.
2. Landing gear controls - DOWN and POSITIVE LOCK.
3. Ski selector handle (if installed and required) - DOWN and NEUTRAL.
4. Fuel booster pump switches - ON.
5. Wing flaps - As required.
6. Landing lights - As required.
7. Propeller controls - Full INCREASE.

AFTER LANDING

1. Wing flaps - UP, then NEUTRAL after checking indicator.
2. Cowl flaps - OPEN, then OFF.

**C-47 & C-117 SERIES
 CONDENSED CHECK LIST — PILOT AND CO-PILOT
 [Continued]**

**POWER CHART - AUTO-LEAN MIXTURE - 140 MAXIMUM BMEP
 R-1830-90C (LOW BLOWER) or R-1830-90D ENGINES**

PRESSURE ALTITUDE	STAND. TEMP.	500		550		600		650	
		HORSEPOWER		HORSEPOWER		HORSEPOWER*		HORSEPOWER	
Sea Level	15.0	1700	30.4	1720	32.3	1865	32.1	2020	32.1
1,000	13.0	1700	30.1	1720	32.2	1865	32.0	2020	32.0
2,000	11.0	1700	29.9	1720	32.1	1865	32.0	2020	31.9
3,000	9.1	1700	29.7	1720	32.0	1865	31.9	2020	31.8
4,000	7.1	1700	29.4	1720	31.7	1865	31.6	2020	31.5
5,000	5.1	1700	29.2	1720	31.4	1865	31.4	2020	31.3
6,000	3.1	1700	29.0	1720	31.2	1865	31.2	2020	31.1
7,000	1.1	1700	28.8	1720	30.8	1865	31.0	2020	30.9
8,000	— .8	1700	28.6	1750	30.2	1865	30.8	2020	30.7
9,000	—2.8	1700	28.4	1790	29.5	1880	30.4	2020	30.6
10,000	—4.8	1730	27.7	1830	28.7	1920	29.6	2020	30.4
11,000	—6.8	1770	27.0	1870	28.0	1970	28.8	2055	29.8
12,000	—8.8	1810	26.3	1910	27.2	2010	28.2	2095	29.1
13,000	—10.8	1850	25.6	1960	26.6	2050	27.5		
14,000	—12.7	1890	25.1	2000	26.0	2090	26.8		
15,000	—14.7	1935	24.5	2040	25.2				

Power correction for variation of outside air temperature from standard. Reduce Manifold Pressure $\frac{1}{2}$ " Hg. for each 10°C Carburetor Air Temperature is below standard. Increase Manifold Pressure $\frac{1}{2}$ " Hg. for each 10°C Carburetor Air Temperature is above standard.

* Recommended power setting for USAFE aircraft. (Average Fuel Consumption at 6,000' - 90 GPH.)

Chart prepared from chart A-14, Appendix I of T.O. 1C-47B-1, dated 1 January 1957

C-47 & C-117 SERIES

CONDENSED CHECK LIST — PILOT AND CO-PILOT

(Continued)

ALTIMETER PRESSURE SETTING

INCHES OF MERCURY	MILLIBARS	INCHES OF MERCURY	MILLIBARS
28.50	965	29.75	1007
28.55	967	29.80	1009
28.60	968	29.85	1011
28.65	970	29.90	1013
28.70	972	29.95	1014
28.75	974	30.00	1016
28.80	975	30.05	1018
28.85	977	30.10	1019
28.90	979	30.15	1021
28.95	980	30.20	1023
29.00	982	30.25	1024
29.05	984	30.30	1026
29.10	985	30.35	1028
29.15	987	30.40	1030
29.20	989	30.45	1031
29.25	991	30.50	1033
29.30	992	30.55	1035
29.35	994	30.60	1036
29.40	996	30.65	1038
29.45	997	30.71	1040
29.50	999	30.77	1042
29.55	1001	30.83	1044
29.60	1002	30.89	1046
29.65	1004	30.95	1048
29.70	1006	31.00	1050

ALTITUDE AND RUNWAY LENGTH

FT	METERS	FEET	METERS
16	5	1640	500
33	10	1804	550
66	20	1970	600
98	30	2130	650
131	40	2300	700
164	50	2460	750
197	60	2620	800
230	70	2790	850
262	80	2950	900
295	90	3120	950
328	100	3280	1000
492	150	4920	1500
656	200	6560	2000
820	250	8200	2500
985	300	9850	3000
1150	350	11500	3500
1312	400	13120	4000
1476	450	14760	4500

VISIBILITY

MILES	KMS.	METERS
.5	.8	804
1	1.6	1609
2	3.2	3219
3	4.8	4828
4	6.4	6437
5	8.0	8047
6	9.7	9656
7	11.2	11265
8	12.9	12874
9	14.5	14484
10	16.0	16093

TEMPERATURE

CENT.		FAHR.
50	—	122
45	—	113
40	—	104
35	—	95
30	—	86
25	—	77
20	—	68
15	—	59
10	—	50
5	—	41
0	—	32
— 5	—	23
—10	—	14
—15	—	5
—20	—	— 4
—25	—	—13
—30	—	—22
—35	—	—31
—40	—	—40

C-47 & C-117 SERIES
CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

3. Fuel booster pump switches - OFF.
4. Tail wheel • UNLOCKED.
5. Hydraulic pressure - Check.
6. Anti-icers and de-icers - OFF.
7. Trim - Neutral.
8. Radios - All unnecessary radio equipment OFF.

POST FLIGHT ENGINE CHECK

1. Tail wheel - LOCKED.
2. Parking brake - Set.
3. Idle speed and mixture check - Check.
4. Ignition switch check - Check.
5. Power and ignition check - Check.

ENGINE SHUTDOWN

1. Tail wheel - LOCKED.
2. Parking brakes - Set.
3. Throttles - 1200 rpm.
4. Oil dilution - As required.
5. Inverters - OFF.
6. Right engine mixture control - IDLE CUT-OFF (do not advance throttle).
7. Suction and de-icer pressure - Check.
8. Left engine hydraulic check (on modified aircraft only) - Check.

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C-47 & C-117 SERIES
CONDENSED CHECK LIST — PILOT AND CO-PILOT
(Continued)

9. Left engine mixture control - IDLE CUT-OFF.
10. Ignition switches - OFF (do not advance throttle).

BEFORE LEAVING AIRCRAFT

1. Fuel tank selectors - OFF.
2. Carburetor air - FILTER.
3. Hydraulic controls - Set.
4. Radio equipment - OFF.
5. Inverters - OFF.
6. Wheel chocks - In place and brakes released.
7. Gear safety pins and control surface locks - Installed.
8. All switches (except generator switches) - OFF.
9. APP (if installed) - OFF.
10. DD Form 781 - Completed.
11. All doors - Closed.