

## PILOT'S AND FLIGHT MECHANIC'S

## ABBREVIATED

## FLIGHT CREW CHECKLIST

## NAVY SERIES

## C-54 AIRCRAFT

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**INITIAL INSPECTION.**

1. Tail Stand — In place.
2. Landing Gear Ground Safety Locks — In place.
3. Wheel Chocks — In place.
4. Forward Lower Cargo Compartment Checked.
5. GPU (if available) — Positioned.
6. Ladder/Loading Ramp — Checked secure.
7. Ignition Switches and Battery Switch — OFF.
8. Landing Gear Lever — DOWN.
9. Trim Tabs — Neutral.

**EXTERIOR INSPECTION.**

Between Main Cabin Door and Left Wing Root.

1. Fuselage Skin and Fairing — Check.
2. Flare Chutes — Check.

Trailing Edge Left Wing.

1. Flaps — Check.
2. Aileron — Check.
3. Inspection Plates — Check security.

Left Wing Tip to No. 1 Nacelle.

1. Navigation Lights — Check.
2. Inspection Doors and Plates — Check security.
3. Deicer Boots — Check.
4. Underside of Wing — Check.

No. 1 Nacelle.

1. Fuel Strainer Drain — Check.
2. Fuel Tank Drain Valve — Check.
3. Fuel Sump Drain — Check.
4. Propeller Blades and Dome — Check.
5. Front of Engine — Check.
6. Carburetor Air and Oil Radiator Airscoop — Check.
7. Cowling — Check.
8. Exhaust Stack — Check.
9. Cowl Flap, Rear of Engine, Exhaust Stack Retainer Rings — Check.
10. Engine — Check for oil leaks.
11. Oil Cap Door — Visually check closed.

Wing Section Between No. 1 and No. 2 Nacelles.

1. Underside of Wing — Check.
2. Landing Light — Check.

No. 2 Nacelle.

1. Repeat items for No. 1 Nacelle.

Inside Wheel Well No. 2 Nacelle.

1. Firewall Shutoff Valve — Check.
2. Propeller Feathering Motor — Check.
3. Fuel, Oil, and Hydraulic Lines — Check.
4. Fuel Tank Drain — Check.
5. Oil Tank Drain — Check.
6. Electrical Junction Box Plate and Main Line Resistor — Check.
7. Gear Uplatch — Check.
8. Main Gear — Check.
9. Brake Assembly — Check.
10. Brake Deboosters and Bleeds — Check.
11. Shuttle Valves — Check.
12. Tires and Wheels — Check.
13. Wheel Well — Check.

Wing Section No. 2 Nacelle to Fuselage.

1. Wing — Check.
2. Cross Feed Drain — Check.
3. Wing Deicer Boot — Check.
4. Fuel Tank Drain Valve — Check.

Fuselage, Wing to Nosewheel Well.

1. Anti-Icing Pumps — Check.
2. Trailing and Fixed Antennas — Check.
3. ADF Loop Housing — Check.
4. Manual Loop — Check.
5. CO<sub>2</sub> Discharge Disc (if installed) — Check.

Nosewheel Well.

1. Hydraulic Lines, Cables, Friction Brake, Wiring, Doors, and Actuation Struts — Check.
2. CO<sub>2</sub> Cylinders — Check.
3. Gear Uplatch — Check.
4. Nose Gear Strut, Tire Wheel Plate, and Static Ground Wire — Check.
5. Ground Safety Lock, Torque Link and Pin, Ahrens Cable — Check.
6. Nose Heater and Ventilating Scoop — Check.
7. Autopilot Oil Filter — Check for leaks.
8. Pitot Static Vent Drain — Check.
9. Pitot Tube — Remove covers and check for damage.
10. Radome and Radar (if installed) — Check.

Nose to Right Wing.

1. CO<sub>2</sub> Discharge Disc (if installed) — Check.
2. Battery Compartment Access Door — Check.
3. Driftmeter Lens and Reference Line — Check.
4. Forward Lower Cargo Compartment Door — Check.
5. Hydraulic Compartment — Check for leaks, fluid quantity and pressure.

Right Wing

1. Wing Section — Repeat Wing Section No. 2 Nacelle to Fuselage.
2. No. 3 Nacelle — Repeat No. 1 Nacelle.
3. No. 3 Wheel Well — Repeat Inside Wheel Well No. 2 Nacelle.
4. Wing Section Between No. 3 and No. 4 Nacelles — Repeat Wing Section Between No. 1 and No. 2 Nacelles.
5. No. 4 Nacelle — Repeat No. 1 Nacelle.
6. No. 4 Nacelle to Right Wing Tip — Repeat Left Wing Tip to No. 1 Nacelle.
7. Trailing Edge — Repeat Trailing Edge Left Wing.
8. Trim Tab — Check for centering and condition.

Wing to Tail Right Side.

1. Antennas — Check.
2. Aft Lower Cargo Compartment Door — Check.

Tail Section.

1. Deicer Boots — Check.
2. Elevators, Rudder, and Bonding — Check.
3. Trim Tabs — Check for centering and condition.
4. Static Dischargers — Check.
5. Tail Light — Check.
6. Anticollision Light — Check.
7. Tail Skid and Support — Check.
8. Cabin and Cargo Door — Check.

**INTERIOR INSPECTION.**

Main Cabin/Cargo Compartment.

1. Main Door Emergency Releases and Hinges — Check.
2. Ditching Line — Check secure and stowed.
3. Emergency Escape Slide — Aboard and stowed.
4. Fire Extinguishers — Check.
5. Tail Cone — Check.
6. Passenger Lavatory — Check.

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7. Aircraft Ladder and Cargo Tiedown Equipment — Check.
8. First Aid Kits — Check.
9. Life Rafts and Vests — Check.
10. Emergency Radio — Check, condition and stowed.
11. Flight Orderly Supplies — Check.
12. Cargo Distribution and Security — Check.
13. Seat Belts — Check.
14. Passenger Oxygen — Check.
15. Emergency Exit Doors, Top of Wing, Fuel, Oil, and Anti-Icing Caps — Check.
16. Battle Lanterns — Check.
17. Cabin — Check general condition.
18. Cabin Lights — Check operation.

Crew Compartments.

1. Fuselage Tanks (if installed) — Check.
2. Auxiliary Oil Tank — Check pump operation and oil quantity.
3. Reserve Hydraulic Fluid Funnel and Wrench — Check.
4. Tool Kit — Check on board for transport missions.
5. Emergency Hand Axe — Check.

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6. Crew's Lavatory — Check.
7. Asbestos Gloves — Check aboard.
8. Crew Compartment Lights — Check operation.
9. Water Availability — Check.
10. Cabin Heaters — Check, OFF, hot air door OPEN.
11. Circuit Breakers and Fuses — Check.
12. Very Pistol — Check, pistol and cartridges available.
13. Navigator's Table — Check.
14. Driftmeter — Check, caged and positioned.
15. Astrodome — Check.
16. Emergency Escape Line — Check secured and stowed.
17. Navigation Equipment — Check.
18. Flashlights — Check aboard.
19. Curtain — Check.
20. Ditching Palacards — Check.
21. Electronic Equipment — Check.
22. Radio and Communications Equipment — Check.
23. Windshields — Check.
24. Oxygen — Check.
25. Pitot Heaters — Check, then OFF.

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26. Emergency Alarm Bell — Check.
27. Windshield Anti-Icer Pumps — Check, then OFF.
28. Propeller Anti-Icing Pumps — Check, then OFF.
29. Instrument and Warning Lights — Check.
30. Deicer Fluid — Check.
31. Hydraulic Fluid — Check.
32. Trim Tabs — Check and set.
33. Magnetic Compass — Check.
34. Emergency Airbrakes Pressure — Check 950 to 1050 psi.
35. Autopilot Oil Shutoff Valve — Check for leakage, safety wired ON.
36. Aldis Lamp — Check, plugged in, lamp operating.
37. Auxiliary Hydraulic Hand Pump — Check.
38. Pilots' Compartment Heater and Blower — Check, then OFF.
39. Fuel and Oil Quantity — Check.

**PRE-COCKPIT CHECK.**

1. Radar, Radios, SIF — OFF.
2. Battery Switch — OFF.

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3. Instrument (Inverter) Switch — OFF.
4. Pilots' Compartment and Cabin Warning Lights — Checked.
5. Navigation, Pilots' Compartment and Landing Lights — Checked.
6. FASTEN SEAT BELT/NO SMOKING Sign — ON.
7. Deicers and Anti-Icers — OFF.
8. Engine Selector (C-54S) — OFF.
9. Booster Pumps — OFF.
10. Generators — ON.
11. Pitot Heaters — OFF.
12. Ignition — OFF.
13. Pilots' Compartment Heater and Blower — Climatic.
14. Emergency Airbrake Handles — OFF and safetied.
15. Fire Extinguisher Selector Handles — IN and safetied.
16. Gyros — Uncaged.
17. Vacuum Pump Selector — Set, No. 3 Engine.
18. Static Selectors — NORMAL.
19. Emergency Airbrake Pressure — 1000 ( $\pm 50$ ) psi.
20. Trim Tabs — Set.
21. Fuel Tank Selectors — MAIN TANKS ON.

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22. Carburetor Air — COLD.
23. Crossfeeds — OFF.
24. Propellers — Forward.
25. Throttles — Set.
26. Mixtures — IDLE CUT OFF.
27. Landing Gear Lever — DOWN.
28. Wing Flaps — UP.
29. Blowers — LOW and locked.
30. Cowl Flaps — OPEN.
31. Auxiliary Fuel Tanks — OFF.
32. Hydraulic Bypass — DOWN.
33. Hydraulic Hand Pump Selector — CLOSED (forward).
34. Emergency Gear Extension Handle — OPEN (aft).
35. Pre-Cockpit Checklist — Completed.

**BEFORE STARTING ENGINES.**

1. Passenger Briefing — Completed.
2. Aircrew Inspections — Completed.
3. Weight and Balance Form F and Manifest — Aboard.
4. Takeoff, Climb, and Landing Data — Computed.

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5. Oxygen and Smoke Masks — Installed.
6. Seats and Rudder Pedals — Adjusted.
7. Hydraulic Pressure — 1200 psi (minimum).
8. Parking Brakes — Set.
9. GPU/APP — On the line.
10. Bus Voltage — 26 to 28 volts.
11. Instrument/Inverters — ON.
12. Interphone — ON.
13. VHF/UHF — ON.
14. Quantity Indicators — Fuel, oil, and alcohol checked.
15. Manifold Pressures — Noted.
16. Autopilot — Set/DISENGAGED.
17. Chocks — In place.
18. Before Starting Engines Checklist — Completed.

**BEFORE TAXI.**

1. Starter Selector (C-54S) — OFF.
2. External Power — Removed and clear.
3. Battery Switch — ON.
4. Booster Pumps — OFF.
5. Radar Inverter — ON.

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6. Radios, Radio Altimeter, SIF — ON.
7. Hydraulic Pressure — Checked.
8. Door Warning Light — OFF.
9. APP — Climatic.
10. Vacuum Pressure — Checked, set on No. 3 engine.
11. Fluxgate — Erected.
12. Flight Instruments — Set and UNCAGED.
13. Cabin Report — Secure, 3 pins and post aboard.
14. Ignition Grounding — Checked.
15. Chocks — Removed.
16. Before Taxi Checklist — Completed.

**TAXI CHECK.**

1. Brakes — Checked.
2. Engine Analyzer — ON.
3. Flaps — UP.
4. Fuel Tank Selectors — Checked, set for takeoff.
5. Flight Instruments — Checked.
6. Taxi Checklist — Completed.

**ENGINE RUNUP.**

**Note**

Only items marked with asterisk (\*) need be accomplished on thru-flight.

- \*1. Parking Brakes — Set.
- \*2. Wing Flaps — Set, 15 degrees.
3. Airfoil Deicers — Checked and OFF.
4. Temperatures and Pressures — Checked.
- \*5. Mixtures — AUTO RICH.
- \*6. Engines — Set, 1700 rpm.
7. Blower Levers — HIGH.
8. Generators — Checked.
- \*9. Propellers — Checked and forward.
10. Carburetor Air — Checked COLD.
11. Propeller Feathering — Checked.
- \*12. Throttles — Field barometric.
- \*13. Magnetos — Checked.
14. Blowers — Checked LOW.
15. APP — OFF.
- \*16. Engine Runup — Completed.

**BEFORE TAKEOFF — PHASE I.**

1. Trim Tabs — Set.
2. Navigation Radios and Radar — ON and checked.
3. Flight Instruments — Set.
4. Crew Briefing — Completed.
5. Emergency Gear Extension Handle — CLOSED (forward).
6. Booster Pumps — HIGH.
7. Gust Lock — OFF.
8. Controls — Checked.
9. Prop Anti-Icing — Climatic.
10. Seat Belt and Shoulder Harness — Fastened.
11. Phase I Checklist — Completed.

**BEFORE TAKEOFF — PHASE II (LINE UP)**

1. Pilots' Compartment Windows — Closed and locked.
2. Cowl Flaps — TRAIL.
3. Wing Flaps — Checked, 15 degrees.
4. Mixtures — AUTO RICH.
5. Anticollision Light — ON.
6. Pitot Heaters — Climatic.

7. SIF — NORMAL (Mode and code as briefed).
8. Before Takeoff Checklist — Completed.

**CLIMB.**

1. Landing Lights — RETRACT and OFF.
2. Gear Lever — NEUTRAL.
3. Wing Flaps — UP.
4. Hydraulic Bypass — UP.
5. Fuel Flow — Checked.
6. Generators — Checked.
7. FASTEN SEAT BELT/NO SMOKING Signs — As required.
8. Climb Checklist — Completed.

**CRUISE.**

1. Cowl Flaps — CLOSED.
2. Cruise Power — Set.
3. Mixtures — AUTO LEAN.
4. Radio Altimeter — OFF.
5. Altimeter — Set.
6. Tank Selectors — As required.

7. Booster Pumps — As required.
8. Cruise Checklist — Completed.

**CRUISING DESCENT.**

1. Approach and Landing Data — Computed.
2. Radio Altimeter — ON.
3. Main Tank Selectors — ON.
4. Crossfeeds — OFF.
5. Blowers — Exercised and LOW.
6. Hydraulic Bypass — DOWN.
7. Hydraulic and Emergency Airbrake Pressures — Checked.
8. Emergency Gear Extension Handle — CLOSED. (forward).
9. Booster Pumps — HIGH.
10. Trailing Antenna — IN.
11. Navigator's Compartment — Secured.
12. Passenger Briefing — Completed.
13. FASTEN SEAT BELT/NO SMOKING Signs — ON.
14. Seat Belts and Shoulder Harness — Fastened.
15. Autopilot — OFF.

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16. Crew Briefing — Completed.
17. Cruising Descent Checklist — Completed.

**APPROACH.**

1. Mixtures — AUTO RICH.
2. Propellers — Rpm 2100, set.
3. Wing Flaps — Set.
4. Carburetor Air — Climatic.
5. Cabin Heaters — OFF.
6. Pilots' Compartment Heater — Climatic.
7. Secondary Emergency Bus (C-54S) — ON.
8. Landing Lights — Climatic.
9. Approach Checklist — Completed.

**BEFORE LANDING.**

1. Propellers — Rpm 2300, Set.
2. Landing Gear — DOWN.
3. Cowl Flaps — Climatic.
4. Wing Deicers — OFF.
5. Before Landing Checklist — Completed.

**AFTER LANDING.**

1. Propellers — Forward.
2. Cowl Flaps — OPEN.
3. Emergency Gear Extension Handle — OPEN (aft).
4. Wing Flaps — UP.
5. Pitot Heaters — OFF.
6. Anticollision Light — OFF.
7. SIF — OFF.
8. Booster Pumps — OFF.
9. Gust Lock — ON.
10. Unnecessary Radios — OFF.
11. Radio Altimeter — OFF.
12. Radar — OFF.
13. Engine Analyzer — OFF.
14. APP — OFF.
15. After Landing Checklist — Completed.

**SECURE AIRCRAFT.**

1. Parking Brakes — Set.
2. Throttles — Set, 1000 rpm.
3. Mixtures — IDLE CUT OFF.

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4. Ignition Switches — OFF.
5. Landing Lights — RETRACT and OFF.
6. Navigation and Pilots' Compartment Lights — OFF.
7. Pilots' Compartment Heater — OFF.
8. Radios — OFF.
9. Instruments Switches — OFF.
10. Inverters — OFF.
11. Interphone Switch — OFF.
12. Autopilot Power Switch — OFF.
13. Fuel Tank Selectors — OFF.
14. Wheel Chocks — In place.
15. Parking Brakes — OFF.
16. APP — OFF.
17. Landing Gear Safety Locks and Tail Stand — In place.
18. Battery Switch — OFF.
19. Secure Checklist — Completed.

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**C-54 LANDING DATA CARD**

**CONDITIONS**

GROSS WEIGHT	Pounds
RUNWAY LENGTH	Feet
RUNWAY SLOPE	Percent
FIELD ELEVATION	Feet
PRESSURE ALTITUDE	Feet
DENSITY ALTITUDE	Feet
OAT ° C CAT	° C
DEW POINT	° F
WIND COMPONENT	
RUNWAY CONDITION READING (RCR)	

**TAKEOFF**

PREDICTED MANIFOLD PRESSURE	In. Hg
BRAKE HORSEPOWER AVAILABLE	BHP
TAKEOFF GROUND RUN	Feet
CRITICAL FIELD LENGTH	Feet
ACCELERATION CHECK MARKER/TIME	
ACCELERATION CHECK SPEED	Knots
REFUSAL SPEED	Knots
TAKEOFF SPEED (LIFTOFF)	Knots
FLAP RETRACTION SPEED	Knots

**LANDING IMMEDIATELY AFTER TAKEOFF**

THRESHOLD SPEED (130%)	Knots
TOUCHDOWN SPEED (120%)	Knots
TOTAL LANDING DISTANCE	Feet

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**C-54 LANDING DATA CARD**

**CONDITIONS**

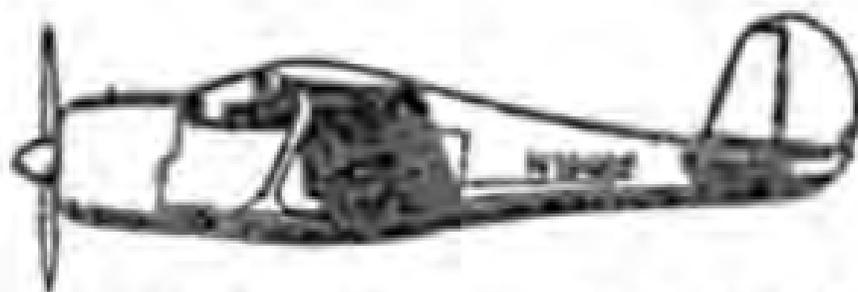
GROSS WEIGHT	.....	Pounds
RUNWAY LENGTH	.....	Feet
RUNWAY SLOPE	.....	Percent
FIELD ELEVATION	.....	Feet
PRESSURE ALTITUDE	.....	Feet
DENSITY ALTITUDE	.....	Feet
TEMPERATURE	.....	° C
WIND COMPONENT	.....	
RUNWAY CONDITION READING (RCR)	.....	

**LANDING**

THRESHOLD SPEED (130%)	.....	Knots
TOUCHDOWN SPEED (120%)	.....	Knots
GO-AROUND SPEED (TAKEOFF)	.....	Knots
TOTAL LANDING DISTANCE	.....	Feet

DC-4/C-54

AIR OPERATIONS SPECIALIST  
COMMERCIAL PILOT - AIRPLANE  
SINGLE & MULTI ENGINE LAND/SEA



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