

**PILOT'S OPERATING HANDBOOK
AND
FAA APPROVED AIRPLANE
FLIGHT MANUAL**

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Columbia 400 (LC41-550FG)

Columbia Aircraft Manufacturing Corporation

22550 Nelson Road

Bend Municipal Airport

Bend, Oregon 97701

Phone: (541) 318-1144

Fax: (541) 318-1177

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THIS HANDBOOK INCLUDES THE MATERIAL REQUIRED TO BE FURNISHED TO THE PILOT BY THE FEDERAL AVIATION REGULATIONS AND ADDITIONAL INFORMATION PROVIDED BY THE MANUFACTURER, AND CONSTITUTES THE FAA APPROVED AIRPLANE FLIGHT MANUAL.

This Handbook meets GAMA Specification No. 1, *Specification for Pilot's Operating Handbook*, issued February 15, 1975 and revised September 1, 1984.

Approved by the Federal Aviation Administration

By: E. P. Kolano
(Name)

Title: Manager, Seattle Area Certification Office

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CAUTION

Avoid rapid throttle movement in order to reduce manifold pressure overboost. Smooth throttle movements allow the turbochargers to keep pace with the engine operating conditions.

The landing attitude is slightly nose up so that the main gear touches the ground first. After touchdown, the back-pressure on the elevator should be released slowly so the nose gear gently touches the ground. Brakes should be applied gently and evenly to both pedals. Avoid skidding the tires or holding brake pressure for sustained periods.

Short Field Landings – In a short field landing, the important issues are to land just past the beginning of the runway at minimum speed. The initial approach should be made at 85 to 90 KIAS and reduced to 80 KIAS when full flaps are applied. A low-power descent, from a slightly longer than normal final approach, is preferred. It provides more time to set up and establish the proper descent path. If there is an obstacle, cross over it at the speed indicated in the landing schedule in Figure 5 - 36 on page 5-41. Maintain a power on approach until just prior to touchdown. Do not extend the landing flare; rather, allow the airplane to land in a slight nose up attitude on the main landing gear first. Lower the nose wheel smoothly and quickly, and apply heavy braking. However, do not skid the tires. Braking response is improved if the flaps are retracted after touchdown.

Crosswind Landings – When landing in a strong crosswind, use a slightly higher than normal approach speed, and avoid the use of landing flaps unless required because of runway length. If practicable, use an 85 to 90 KIAS approach speed with the flaps in the takeoff position. A power descent, from a slightly longer than normal final approach, is preferred. It provides more time to set up and establish the proper crosswind compensation. Maintain runway alignment either with a crab into the wind, a gentle forward slip (upwind wing down), or a combination of both. Touch down on the upwind main gear first by holding aileron into the wind. As the airplane decelerates, increase the aileron deflection. Apply braking as required. Raising the flaps after landing will reduce the lateral movement caused by the wind and also improves braking. The maximum demonstrated crosswind component for landing is 23 knots.

Sideslipping the airplane will cause the airspeed to read up to 5 kts higher or lower, depending on the direction of the sideslip. This occurs because the static air source for the airplane is only on one side of the fuselage.

Balked Landings – In a balked landing or a go-around, the primary concerns are to maximize power, minimize drag, and establish a climb. Initiate a go-around by the immediate but smooth full application of power. If the flaps are in the landing position, reduce them to the takeoff positions once a positive rate of climb is established at 80 KIAS. Increase speed to V_Y . When the airplane is a safe distance above the surface and at 106 KIAS or higher, arm the backup fuel pump and retract the flaps to the up position.

Heavy Braking – After heavy braking, especially when the airplane is near gross weight, allow the brakes to cool for about 20 minutes before additional heavy braking. The brakes may overheat if there is repeated heavy braking without adequate cooling time.

Oxygen System – After landing, select the Oxygen system OFF, and verify the valve closed by leaving a mask inserted into the overhead outlet, releasing the outlet pressure. If oxygen continues to flow after 5 seconds, the oxygen valve has failed to close.

SHUTDOWN

The engine should be idled at 900 RPM for five minutes minimum after landing (part of this may be taxi time) in order to give the turbochargers time to cool down while oil is still circulated to the bearings. If the engine is shutdown hot, the oil left in the turbochargers will be heated to the temperature of the turbochargers (in excess of 1000°F) and cannot properly lubricate. If engine RPM