

REPUBLIC RC-3 SEABEE Model Guide

The REPUBLIC RC-3 SEABEE is a single-engine piston amphibian with a boat hull, a roof-mounted engine and a large cabin. Registry data for the RC-3 family shows up to 4 passengers, up to 480 nm range and up to 90 kt cruise. Expect high maintenance and a noisy, slow, characterful flying boat.

KEY TAKEAWAYS

- The original Franklin engine is the weak spot; many Seabees have been re-engined with larger Lycomings.
- Gear must be up for water landings. Seabees have sunk after landing gear-down on water.
- Maintenance is heavy: it needs the care of both an airplane and a boat. Budget hours and money for it.
- Check hull, wing-strut fittings, controls and cables closely; old directives list recurring problem areas.

WHAT TO INSPECT

Drain the hull compartments through the keel plugs. Check the sponsons, which come off under side load, and the water rudder behind the tailwheel. The exposed main gear pivots aft and gives no drag benefit. Look at the engine closely, because most accidents involve engine failures. A ladder is needed to reach the engine to check oil.

AIRWORTHINESS DIRECTIVE HISTORY

Old Norwegian directives for the RC-3 SEABEE call for repeated checks. These cover the gear lever arm weld, control cables (every 25 hours, with removal every 600 hours) and the engine mount channel for cracks. They also cover wing-strut fittings for hidden corrosion (every 25 hours) and rudder beam cracks. Another directive covers the propeller control bolt and a Lycoming/Hartzell reverser spring.

FLYING AND OPERATING NOTES

Fuel is one fuselage tank of about 75 gallons of 80-octane, burning about 13 gph in cruise. The fuel gauge has been called unreliable, so use a dipstick. A heavy, hot, high-altitude water takeoff can take 3 miles. Land takeoff is at about 60 mph, flaps up. Control response is not crisp, taxiing in gusty crosswinds is demanding, and cabin noise is very high.

SPECIFICATIONS

Fuel Capacity Gal	75
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PERFORMANCE

Cruise Fuel Burn Gph	13
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SAFETY NOTES

- Confirm the gear is up before every water landing: left main, right main, tailwheel.
- Avoid side loads on the sponsons and touching down on water with rudder deflected; the water rudder can come off.
- Wait 5 minutes after engine stop before dipping the tank, and do not trust the fuel gauge alone.