THE SEABEE: A BATTERED REVOLUTIONARY, BUT LIKE MOLLY BROWN . . .

LUMBERING STIFFLY and arthritically out of the past comes the weary, wary Seabee. Weary, because it has reached airplane senility—18 years. Wary, lest fortune deal it another harsh slap with the back of her hand; hunched, its turtle back hardened to the snickers of those who scoff, armored against the scornful stares of those who know the past.

It, and its brothers, squat 1,060-strong like dislodged segments of the Maginot Line, tethered at airports all over the nation, or like 'Old Ironsides' wallowing heavily at dockside. They sit taciturn, wincing inwardly at passing remarks like: "That thing is a flying anvil." "Watch one take off. They barely move." "The tail is so big it acts like a sail, and you can't control the aircraft in the water."

If an airplane could blush, the Seabee would be dayglow red.

Never had an airplane been heralded, feted and showered with confetti, congratulations and brass-band ballyhoo as was the Seabee at its introduction in 1946. Never was so much promised and so much expected.

Production rates were to be stupendous—5,000 aircraft the first year. The price was to be unbelievable— \$3,995 flyaway at the factory. Construction would be revolutionary—450 parts as compared with more than 1,800 in the conventional airplane; 200 manhours as opposed to 2,500 in the standard aircraft.

And that mighty titan of airplane builders, the Republic Aviation Corp., fresh from a spectacular, triumphant wartime record of building over 15,000 Thunderbolt fighters, was going to carry it off.

Instead, the Seabee got carried off. Carried off in black bunting in the quiet of night-with a whimper, not a bang.

The Seabee was a financial and, to some extent, an aeronautical flop. Indeed, Republic fought boldly and in the grand manner to succeed. With lances drawn and plumes flying, she plunged headlong into the minefield of financial, economic and psychological obstacles that stood in the way of any large-scale postwar light-plane program.

Under the bold leadership of President Alfred Marchev, Republic acquired a complete engine manufacturing company—Aircooled Motors, Inc. and its Franklin powerplants. Engineers who didn't believe an airplane could be built for less than \$4,000 were simply canned, the story goes. And no less than 5,000 orders

for the airplane were received, reflecting the interest of buyers.

But matters quickly went awry. Tools and dies ordered from Detroit firms failed to arrive because the companies were busy supplying the larger orders of auto manufacturers.

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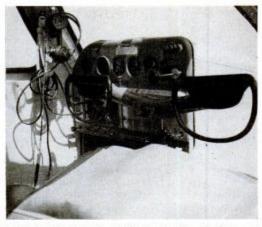
OLD IRONSIDES

By RICHARD B. WEEGHMAN / Managing Editor

Water operations are the Seabee's forte. Reverse pitch prop, plus occasional use of doors as wind brakes, lend the proper amount of maneuverability.







The pontoons, made from two half-sections fastened together, are typical of the Seabee's simplified construction. The instrument panel spans only half the cackpit, permitting use of the passageway to the bow door. The right control wheel is easily removable.

Production schedules were delayed, and the first 175 units ended up being assembled largely by hand and at a cost of about \$13,000 per Seabee.

The \$3,995 pricetag suddenly jumped to \$4,495, and then to \$6,000. And finally, only 1,060, instead of 5,000, Seabees were built. Things got slightly out of hand.

At this point an angry cry of protest rises from a thousand voices. Seabee owners.

"For \$4-6,000 the Seabee is still an awful lot of airplane," comes their complaint.

They said it in 1946, and they say it now.

Forget about then; how about 1964? That squat, turret-like wingéd flying apparatus. How well does it fly after all these years? Just what can it do, and how much does it take to keep it running?

The Seabee's shortcomings have been widely advertised. They're posted on that big bulletin board every pilot keeps in the back of his mind labeled—"Clunkers, Aeronautical."

Prominently listed is the fact that in flying qualities, the Seabee leaves something to be desired. That something, primarily, is speed. With a full 75 per cent power on the hefty 215-hp Franklin engine, the Seabee struggles along at no more than about 105 mph. Top speed, full throttle, is only 120 mph.

Secondly, the airplane is generally regarded as having too high a wing loading. What this means, simply, is that there's too little wing to support that hefty 3,000-pound gross weight—gracefully, that is.

In pilot parlance, the Seabee "glides like a brick."
And third, it swallows avgas in uncomfortably copious quantities from its 75-gallon rubber-fabric tank.
Owners say 13 to 19 gallons an hour (though it uses 80 octane, at least).

Is there anything good about the Seabee? Well, you won't find it advertised on the bulletin board. Instead, it's embossed in a small velvet booklet filed in the back of the Seabee owner's mental locker of prized possessions—labeled "Compensations."

Foremost among these is the fact that, no matter what its shortcomings, the Seabee is a lot of amphibian for the money. Run through the pages of any Trade-a-Plane and see how many amphibians you can find for less than \$15-20,000—used. Ironically, the Seabee today sells for as much as, or more than, its original price. Of course, you can find some for \$3-4,000, but the average Seabee in good condition will have a pricetag of about \$6-8.000.

Next, the Seabee is affectionately regarded by owners as a "darned good boat airplane." The hull is solid (To quote R. A. Lalli of Stratford, Conn., "The plane is built like a tank.") and Seabee pilots pride themselves on the fact that they trust the aircraft in waters rough enough to have sent other floatplane owners fleeing for shelter. The airplane also has a reverse pitch prop to help on dockside maneuvering.

And third, the Seabee is a flying greenhouse with magnificent visibility and generous interior dimensions, as we found out on a flight with Lalli and pilot George (Zeke) Zahorsky.

But then both good and bad were readily apparent. With three aboard and half fuel, Lalli's battleship grey Seabee flew itself off the ground at about 80 mph. Climbing at 85, the altimeter needle began a painfully slow circuit of the dial (there was no vertical speed indicator in the plane). The specs say 700 feet per minute, but I'd guess we averaged 500 to 600 fpm.

While climbing, the pilot pumps a handle to raise gear and flaps. The landing gear simply swivels up and to the rear to get the wheels out of the way for water operations; it does not tuck away in any wheel well.

Leveling out over the water at about 2,000 feet, we let the Seabee have its head at cruise throttle settings. At 65 per cent power, Lalli's aircraft actually indicated 106 mph, and at 75 per cent, it managed 110.

And the Seabee drones along in a very determined manner. It has the massive, cushioned stability and handling characteristics of a Sikorsky Clipper. The controls are stiff and heavy—unbelievably so for a small airplane, but you can take your hands off the wheel, and the airplane gives the impression it will fly straight to China, by itself.

According to Zahorsky, the Seabee takes turbulence (we encountered none) with rocklike aplomb.

Although Lalli's aircraft was custom-insulated and upholstered in fine fashion, the pilot gets the distinct impression at cruise that the engine way behind is grinding away at a nervous pitch. And while neither noise nor vibration is excessive, they intrude upon the airplane's massive stability.

But visibility is overwhelming. The wing is set well back out of the way, and although it is exactly at eye level in straight and level flight, it drops below the horizon in a turn to present an undisturbed scan.

Stall characteristics can be summed up in a word gentle, and maybe a bit sneaky. With gear and flaps down and power off, the wheel held back, and back, she finally drops mildly, with a bit of a twist—at 54 mph.

But up until then, the altimeter unwinds steadily,

and the airplane mushes happily.

This, according to Zahorsky (an instructor and a pro of many years' flying), is a characteristic that has soured many a pilot on the Seabee, especially in the landing pattern. The airspeed must be kept up at a good level on base and final. Zahorsky uses 85 to 90 mph, and applies throttle generously, as needed, in almost a power-on approach. When the airspeed drops to 75, the airplane settles too rapidly.

"I hold 85 right across the fence," Zahorsky says, "then chop power, hold for one, two, three, four, and I'm on the runway. On a roundout, it won't float."

The story is an old, familiar one. The airplane is not dangerous; you simply have to know how to fly it, and understand its characteristics and limitations. Then it is a gentlemanly, even majestic airplane.

One common complaint is that if you load up the airplane to maximum gross weight, "you have a pig on your hands." But others say the cockpit is so roomy that pilots tend to overload, and hence encounter poor

performance.

To improve the airplane's flying and operating qualities, a myriad of FAA-approved modifications have been offered. There are metal props, larger oil coolers to cut valve trouble, wingtip modifications and spray rail additions. Some wing changes actually lengthen each wingtip a couple of feet; others tack on a splate, which is merely a flat plate fastened at the tip.

The wing modifications not only allow the airplane to take off more quickly; they also, rather surprisingly, permit cruise at lower power settings. Pilots say they can lower the nose (and angle of attack) because of the extra lift. However, because there is so much drag on the airplane to begin with, there is little benefit in increased speed, but the power can be reduced to maintain the same airspeed.

To give an idea of prices, one outfit—Aero Products Engineering, Inc., of Miami, Fla.—offers wing extensions for \$495, and spray rail kits for \$100 a pair.

As for engine problems, the Franklin Engine Co. at

Syracuse, N.Y. has parts and will do overhauls.

And sitting away up in Alexandria, Minn. is a whole warehouse of Seabee parts and components. They are stored and sold by the Inter-Air Corp. (formerly Downer Aircraft), which owns manufacturing rights to the Seabee. It inherited Republic's stock of tools and dies, and can supply almost anything from wings to windows—and does so every day.

So the venerable, much-maligned Seabee can afford to sit tacitum and unblinking at the unkind remarks directed at its 'Old Ironsides' armored shell. It's 18 years old and still going strong; and, like 'Old Iron-

sides, apparently unsinkable. +

REPUBLIC RC-3 SEABEE

SPECIFICATIONS: Engine: Franklin 6A8-215-88F rated 215 hp at 2,500 ft. Propeller: Aeromaster twoblade adjustable-pitch wooden, or Harizell.

Span37	ft. 8 inches
Length27	ft. 11 inches
Height9	ft. 7 inches
Passenger & cre	ew4
Empty weight	
Useful load	1,050 lbs.
Gross weight	3,000 lbs.
Eval conneits	75 note

Baggage (1 pilot)200 lbs. Oil capacity......12 qts.

PERFORMANCE:

Maximum speed120 mp	h
Cruise speed103 mg	h
Initial climb200 fp	m
Range560 mile	es
Service ceiling12,000	H.
Takeoff run801	le.
Takeoff (from water)999	H.
Landing run399	h.



Proud and sturdy, provided there's no hidden corrosion. The tailwheel is steerable, full swiveling beyond a certain limit. Cabin has three doors.