Early models of four-seater offer chance for economical entry into aircraft ownership

Used Aircraft Flight Check:

CESSNA 172

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Photos by the author

■■ Interested in more flying for your buck? Try Cessna's venerable 1956 172. Production began late in 1955 and 1,419 of the square-tailed, straight-back models were produced in 1956 alone. Later, the factory cut down the fuselage for a rear-view window and swept the tail for cosmetic reasons, but most basic components are still interchangeable.

One of the earliest 172s, N5799A built in 1956, sold on the used plane market with 200 hours since complete engine overhaul for $6,000 back in 1964. Now, 14 years and 1,700 hours later, her value has gone up to between $8,000 and $12,000, depending

1956 CESSNA 172

Price $8,000 to $12,000

Specifications		Performance	
Engine	Continental O-300-A, 145 hp @ 2,700 rpm	Takeoff distance (ground roll)	725 ft
Propeller	McCauley metal, fixed-pitch	Takeoff over 50 ft	1,650 ft
Wing span	36 ft	Rate of climb	660 fpm
Length	24 ft	Maximum level speed	135 mph
Height	8 ft 6 in	Normal cruise speed	120 mph
Wing loading	12.6 lb/sq ft	Range at normal cruise	518 sm
Passengers and crew	4	Service ceiling	14,300 ft
Empty weight	1,260 lb	Stall speed (clean)	58 mph
Useful load	940 lb	Stall speed (flaps down)	52 mph
Gross weight	2,200 lb	Landing distance (ground roll)	680 ft
Power loading	15.2 lb/hp	Landing over 50 ft	1,115 ft
Fuel capacity (standard)	42 gal (37 usable)		
Oil capacity	8 qt		
Baggage capacity	120 lb		

Unswept tail, lack of rear window identify "original" Cessna 172, first produced in 1955 and still popular on the used, four-seater market.

on equipment and condition. While cosmetic changes have been made, engines have changed, interior appointments have been improved, and the flat spring-steel landing gear modified, there have been few basic changes in the four-place economy Cessna airframe over these many years.

Where budgeting is a factor, it's hard to beat a clean old Cessna 172. Let's take a good look at N5799A. The owner is ex-USAAF pilot Jack Switzer (AOPA 288995), a California pharmacist, who was kind enough to lend me a set of keys to this ship many years ago before I bought my own older Cessna. I've logged more than 300 hours in 99A on junkets ranging from Death Valley to Mexico to Lake Powell —all around the Southwest.

The "square-back" never let me down, never threw an aeronautical curve, and remained a predictable, solid, easy-to-fly machine. As the airframe and engine aged, heavy surplus instruments were added and both prop and airfoil surfaces received their share of dings. The top speed of 131 mph (5,000 ft and full 2,700 rpm at 11½ gph) called for in the original optimistic owner's manual worked its way down to an actual average of 110 to 115 mph at 2,500 rpm and 7½ gph.

Older airplanes tend to grow fat, and the factory empty weight of 1,290 pounds grew to 1,345 (gross is 2,200 pounds). Thus, with full fuel (37 gal usable) and two people you had only 288 pounds legally for the back seats and baggage. At any density altitude, 99A was a fine two-place plane, since engine wear—even within FAA specifications—robs some power. Under reasonable conditions with low, long airports, she carries four with aplomb.

One of the niceties of the older 172 is its inherent simplicity. Flaps are manual, fuel gauges mounted within the tanks read directly on indicators in the wing roots near the cabin ceiling, and tires are unencumbered with fairings. A goof-proof mixture control takes two hands to lean and helps prevent inadvertent fuel starvation. However, the push-pull electrical switches across the bottom of the pilot's panel can be turned off accidentally with a knee in rough air or just by moving around the cockpit. Thus, if the radio quits or all the electrical gauges suddenly go to zero, reach for the push-pull switches before checking the fuse panel on a subpanel to the left of the throttle.

continued

There's no need for an artificial stall warning on any of the older Cessnas—although one was factory equipped. As the ship approaches a stall, there's a built-in "whoosh" sound from the wing-mounted air vents that takes the place of a horn.

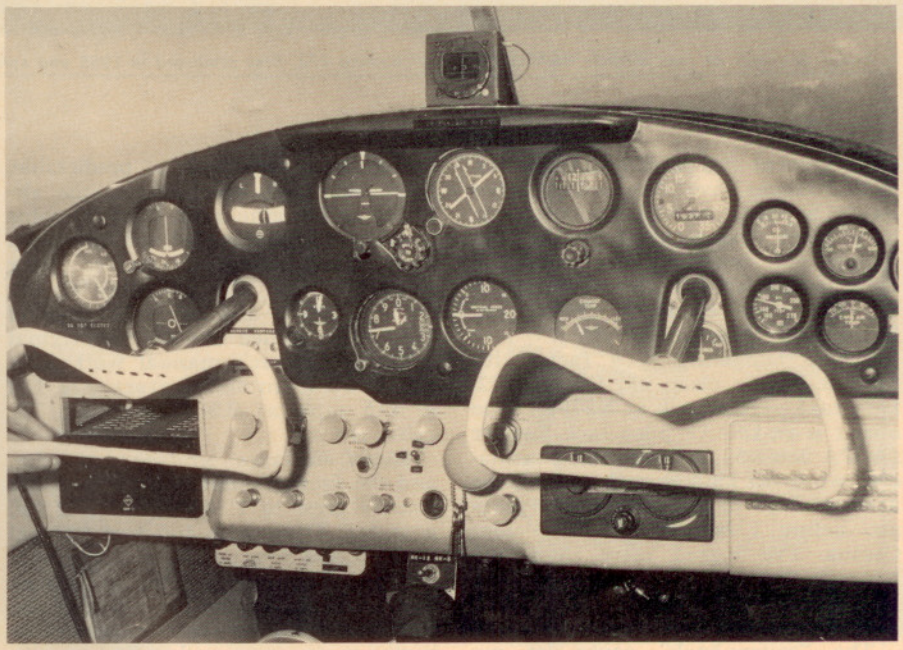
Originally, the 1956 Cessna came out with Goodyear brakes, which made a frightful racket as they wore. Switzer's 99A was recently equipped with a set of modern Cleveland brakes, which greatly improve ground control. "When out of adjustment, the older brakes made such a racket in taxiing that first riders would ask about it," said Switzer. "When I explained that it was 'only the brakes,' I could see that they wondered about the mechanical condition of the remainder of the aircraft."

Maintenance on an older Cessna is relatively simple and economical by today's standards. Fuselage parts are readily available from most salvage shops and replacement items for the Continental O-300A are becoming more available as many owners are converting their 80-octane engines to more modern 100-octane powerplants.

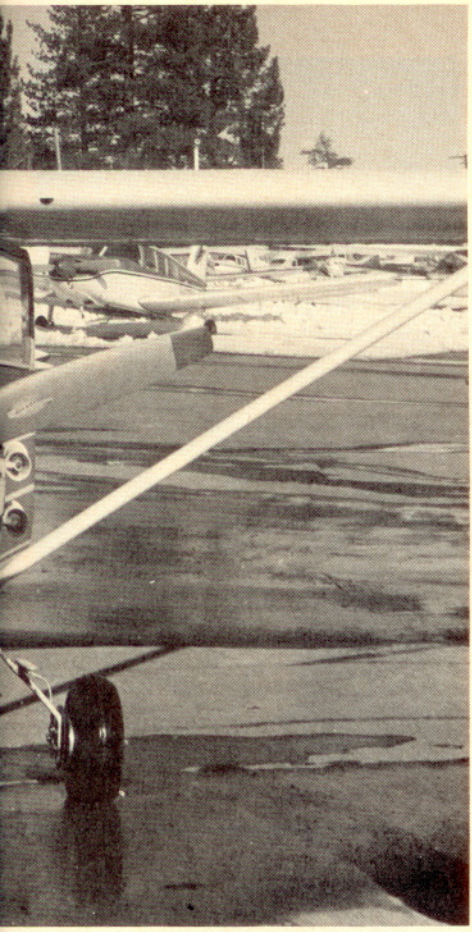
During the years Switzer has owned 99A, he has replaced five of the six cylinders, all because of cracked rings. Now pilots flying this ship make an effort to avoid prolonged power-off glides in cool air. With 80-octane fuel readily available on the West Coast, 99A has not encountered the excessive plug fouling and lead around exhaust valve guides to be found with prolonged use of 100LL fuel.

The full 40° flaps give excellent nose-down visibility on final approach and produce sink rates, power off, of at least 750 fpm at 75 mph. These generous flaps also make it relatively simple to carry partial power on cold-weather approaches.

The manual flap handle, located between the front seats, has a press-to-release button with locking notches for 10, 20, 30, and 40 degrees. Short pilots, and those using shoulder harnesses, may have trouble reaching far enough forward to release the flaps, so this item should be on a preflight checklist.



"Loaded" panel on this 172 includes vacuum-driven gyro instruments, Narco Mark 5, and updated Mark 12 navcom.



Basically little changed from this view, today's 172 has a one-piece windshield, pointed spinner, wheel pants, redesigned intakes—and no more exterior venturis.

Shoulder harnesses can be installed easily since there is already an attach point behind each front seat in the false rear spar.

For short-field takeoffs, 10 degrees of flaps are suggested. In the pattern, turns are not recommended with more than 20 degrees of flaps until on final approach, according to Switzer. Go-arounds with full flaps will present a problem; the flaps should be milked up one notch at a time just as soon as full power is established. Specifications call for a no-flap stall at 58 mph and with full flaps at 52 mph. There is slight elevator buffeting with full flaps.

An item of interest, usually learned by sad experience with some of the older Cessnas, is the possibly of having the worn front-seat lock slip during takeoff. Several accidents have been caused by a pilot pulling back on the control column while on his slide toward the back of the cockpit. A quick fix is to put a cotter-key in the rails to permit just enough aft movement of the left seat so that you can climb aboard (placing baggage behind the pilot's seat does the same job); or, remember to keep your hand on the throttle during takeoff and, if you slide backward, hang onto the throttle and come to a halt.

On night flights, the dome-mounted, red-tinted instrument panel lights are not up to par with today's individually lighted instruments. Frequently the shadow of the pilot's head obscures such essentials as the airspeed indicator on the left, while a copilot or passenger can blank engine instruments at the far right of the panel. Thus a flashlight, cupped to produce subdued light, is almost a must. Wing root fuel gauges are not lighted.

One of the fun-type fringe benefits in working with an older plane is the ever-present opportunity to clean up the ship, do a paint job if you want to tackle a real chore, and replace upholstery and headliners (remember flame-retardant material and an FAA write-off). In doing these chores, you'll meet other pilots doing the same thing and share a camaraderie that is missed at the corner FBO rental or with a new ship that doesn't need much TLC.

Another potential with the older Cessnas is a trade-up to a more-modern powerplant and a controllable prop. While this will more than double your investment in your older airplane, it does solve the 100LL problem while adding materially to overall performance. Owners of 172s with whom I have checked report a doubling in rate of climb, a halving of takeoff roll, and an average cruise increase of 15 mph with a 180-hp Lycoming engine and Hartzell constant-speed prop.

If you want to get your feet wet in aircraft ownership, part ownership, or even an economy lease-back, the square-back 172 has a great deal going for it.

In areas where 80-octane fuel is no problem, the older 172 may be your answer to affording your very own aircraft. □