

Pilot Flight Check:

CESSNA 172/Skyhawk for 1974

What does a company do when it wants to
make the world's most popular
airplane even more popular?

by BERL BRECHNER/AOPA 466558

■ ■ The Cessna 172 is, according to its maker, "the world's most popular airplane." It's hard to believe that more 172s are flying than any commercial airliner, than any military aircraft—there are even more 172s than its little sisters, the 150s which fill traffic patterns across the country each weekend. The company says 20,000 172 models have been sold since 1956.

For 1974 Cessna has taken a good thing and tried to make it better.

And succeeded.

The latest version of the 172/Skyhawk is somewhat slicker looking than previous models due to a redesigned front end. The plane was recently flown east from Wichita to give PILOT a taste of what Cessna was up to. Unsuspecting lineboys at Montgomery County Airpark, Md., offered unsolicited comments like "It's the prettiest 172 I've ever seen," and "Wow, it looks just like the 182."

But the changes aren't all cosmetic.

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Alterations in the cowl structure and wheel fairings allow the company to claim a 6 mph increase in cruise speed at 75 percent power. Cruise at 8,000 feet is billed as 138 mph. Horsepower is the same as in past years—only the aerodynamic qualities have changed.

On one flight in a Skyhawk, the plane did not quite live up to its manufacturer's promise; however, the temperature at 8,000 feet was 57°, somewhat higher than standard. The plane, loaded several hundred pounds under gross, with full power skimmed above the haze at 134 mph true. At that power setting and altitude, the fixed-pitch propeller turned at 2,700 rpm, and the tach needle

The Selling of the Cessna

■ ■ "The Year of the Hawk" is the catch phrase. And Cessna's basic four-place airplane, the Skyhawk, is being pushed in ads from T-shirts to TV.

"We've set a goal of 2,500 airplanes to sell," said an official from the Cessna factory, "and we've never publicly announced a goal that we didn't meet."

At regional dealer meetings held throughout the country during August, company officials from Wichita extolled the virtues of their planes, their pilot training course, their service programs, and their advertising

campaign. The intent was, of course, to sell airplanes and programs to dealers—and to inspire, coach, and cajole the dealers on to a bigger and broader sales effort.

Again this year Cessna will try to sell the masses on the benefits of flying and buying its aircraft. Continuing his TV endorsement campaign, football star Don Meredith will encourage people to get out to the airport for a \$5 introduction to flight. Cessna calls the eight-year-old \$5 offer "one of the most successful promotional offers in the history of aviation." The company claims more than 500,000 people have taken advantage of the deal.

The TV ad campaign will focus around football. Each week for 16 weeks this fall a "Cessna Player of the Week" will be selected by the football writers and will be awarded a private pilot course at any of the 400 Cessna Pilot Centers across the country.

At the end of the football season a "Cessna Player of the Year" will be given an airplane—a Skyhawk II.

Cessna is, clearly, an aircraft manufacturing company. Explaining the expanding stress on training, however, a Cessna official pointed out, "We sell very few airplanes to people who don't know how to fly." The pilot centers were introduced three years ago and now are found at 69 percent of Cessna's dealerships.

Several additions to the course will be introduced this year, including a regular updating service to keep the course materials accurate as aviation regulations and procedures are changed by the government. The pilot course materials are sold as a unit to the pilot centers, which in turn sell the use of the materials to their students.

At its light single-engine model introductions for northeast U.S. dealers—a presentation full of flashy graphics, films and slides—Cessna officials said the primary sales target for the Skyhawk will be "owners of 29,000 four-place aircraft." The pitch to them will be that their current plane will make a sure-fire downpayment on a new Skyhawk.

Through magazine advertising, direct mailings and TV spots, Cessna wants to "build awareness, interest and excitement," said marketing program specialist Ken Wickham. "We've got to tell the world before we can sell the world," he told dealers.

nudged the redline.

A power setting which computed out to about 61 percent provided 2,500 rpm and a true airspeed of 125 mph. A 50 percent power setting of 2,300 rpm still allowed for a true airspeed of 110 mph.

A different Skyhawk flown on a cooler day, cruising at lower altitudes, came right up to the specifications in the owner's manual. On that flight, with the

Cessna's direct mail offer will go to 65,000 current owners of single-engine aircraft. They will be given an invitation to come to the nearest Cessna dealer to test-fly a Skyhawk, and will be given "VIP treatment" during the demonstration.

The company says its prices on the light single-engine line have not been increased since 1971. Moreover, they claim that through extended financing plans the Skyhawk buyer will never pay more than \$265 per month. Payments on an equivalent 1973 plane would have been \$308.01.

Cessna is also trying to beef up its service stations, realizing that the Cessna owner who can't get his plane serviced is not likely to become a Cessna owner again. The service program revolves around a complicated system of classifications and ratings which will apply to dealer service facilities. A service station, depending on its size and capabilities, will be referred to by one of several names (such as Customer Care Dealer, Full Service Dealer, or Customer Care Center), and will be rated by Cessna and given one to four stars. The ultimate goal of the program is to "establish a network of standardized, measured and monitored, aircraft service facilities."

Amid this two-day marketing barrage, the dealers who attended the company show maintained tight lips and watchful eyes. They had been through several hard years, but are now seeing their wallets begin to fatten again. And both they and Cessna want to make sure the upswing continues. □

plane loaded close to gross weight, we cruised at 131 mph true holding 75 percent power at 3,000 feet. The owner's manual promises 130 mph at 2,500 feet, so there was no cause for disappointment.

The plane I flew was a Skyhawk II. Others in the line are the Skyhawk and the standard 172. The basic 172's speeds are up to 3 mph slower because it is not equipped with wheel fairings. All are four-place aircraft.

Cessna is marketing the Skyhawk II as an airplane which comes with a "package of equipment most frequently ordered by Skyhawk owners." The Skyhawk II, a basic IFR plane containing many accessories normally in the optional category, costs \$17,750.

The airplane's added equipment includes a nav/com radio, dual controls, true airspeed indicator, heated pitot, courtesy lights, flashing beacon, alternate static source, nav light detectors, and an emergency locator transmitter.

List price for the 172 is \$14,050, while the Skyhawk is priced at \$15,675.

The 172 for 1974 is as simple an airplane to fly as ever—if not simpler. A camber-lift wing introduced in last year's models is again incorporated in the craft, making slow flight a breeze and stalls a gentle and slow experience.

With flaps up, the plane, at 3,000 feet msl, flew with the stall warning blaring at about 50 mph indicated, and finally nosed into the stall at 45.

The Skyhawk showed remarkable responsiveness and control in 55 mph slow flight. Wrenching the yoke from side to side brought a quick reaction from the wings, with little loss of altitude and no tendency to stall.

Once the flaps were down, bringing the Skyhawk into a stall was a difficult task. The craft, power off, started settling a bit, but did not nose into a stall until the airspeed needle was about a quarter-inch below lowest speed on the gauge—40. With flaps still down and a slow increase up to full power, it was possible to put the airspeed needle against its low end peg, and still fly—and control—the airplane. Finally it stalled, but as in all the other stalls, the wings stayed level and the maneuver allowed a simple recovery.

The flap setting indicator itself is a small circular gauge on the right side of the panel. It was somewhat difficult to see, and on the second Skyhawk I flew it was inaccurate. I did not check its accuracy on the first flight. After a while I found myself ignoring the instrument and looking out the window at the flaps themselves.

In straight and level flight, the Skyhawk holds a heading well, eliminating any requirement for the added cost and weight of rudder trim. During full power climbs, however, there is the normal torque-induced left turning tendency, which is easily corrected with a slight heavy right foot.

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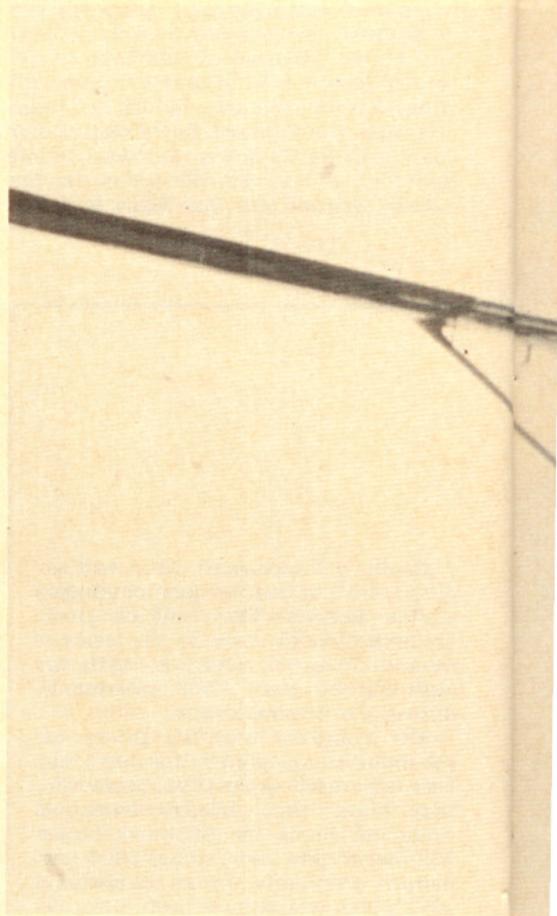
One of the great pleasures of the 172 is the good (for a high-winger) visibility. Seats slide well back for easy entry into the craft, and then are run up almost a foot to allow you (assuming you're not a pro basketball player) to reach the rudder pedals. This puts the pilot's eyes within about two feet of the windshield, with the resulting excellent visibility. The door posts are close to the edge of the pilot's peripheral vision, too.

The interior appointments of the craft are sturdy, relatively plush and convenient. The glare shield is well padded for crash protection. Also, "for elimination of sharp edges and better appearance," the ignition key has been covered with a rubberized plastic coating which shields the bare metal extending from the keyhole. Though the key is cushioned, the pilot of a 172 still faces a center panel of protruding mixture, throttle and carb heat controls.

Another interior change comes in the seats, which have been re-contoured to better fit a human being. Seating was comfortable, and the cushions and seat-backs seemed to provide more than ample ventilation on the warm summer days of the flights.

Changes outside the plane are the re-structured fairings and cowl area. The fairings, made of a type of plastic (as are wing and vertical stabilizer tips), cover the whole wheel, including brake discs and most of the whitewall (optional at \$35) tire. Such an all-encompassing fairing would make adding air to a tire quite a chore—except that Cessna appears to have given the lineboy a break. Small doors in the fairing unlatch to allow simple access to the air valves.

Up front just inside the cowl a horizontal baffle which used to be there is



gone on the '74 model. Also remodeled is the cooling air exit opening in the lower cowl. Those changes account for about 3 of the 6 mph speed increase, and also result, says Cessna, in improved cabin heater and defroster performance. Needless to say, during these hot-day flights I had to take their word for it.



The flight-checked Skyhawk took off in less than 900 feet with a full load, and climbed 500 fpm at 90 mph. Photos by author except as noted.



I would have relished the thought of trying out an air conditioner on the craft. But alas, not this year.

Baggage space in the plane has been increased 4 cubic feet by extending the baggage compartment aft of where it used to end. But the baggage load limit remains the same as it has been—120

pounds. Fifty pounds are allowed in the extended compartment area. The added depth will probably be truly appreciated by the pilot heading to the mountains for a ski weekend, or the man with a lot of fishing rods.

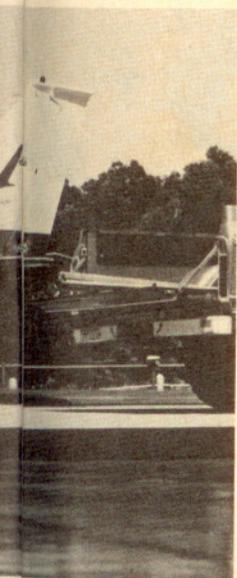
The plane, when fully loaded, does not leave you wondering if you'll make it off the runway. There is no heavy or loaded feel to the craft. With 70 pounds of baggage, three passengers (one at 220 pounds) and full tanks, the weight of one of the Skyhawks I flew came to about 13 pounds below the 2,300 pound gross weight limit.

With that loading at 80°F, from a 540-foot-msl airport, the new Cessna took to the air like it was empty. Takeoff distance as listed in the owner's manual for a fully loaded plane at sea level is 865 feet. That distance was met, if not bettered, with rotation at 65 mph. Climb-out of 500 fpm was easily achieved at an indicated 90 mph using full throttle.

Increasing climb angle to 700 fpm brought the airspeed down to 80. Full power was still required (and is recommended by Cessna for climb in the 172), and turned the prop at 2,400 rpm.

A standard cruise setting of 75 percent power at 3,000 feet required the throttle to be set for 2,575 rpm, only 125 rpm below the redline. At that power

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Redesigned cowl area and wheel fairings account for a slightly new look for the '74 Skyhawk—and an addition of 6 mph to cruise speed. Cessna photo.

setting the Lycoming O-320-E2D engine seemed a bit noisy. Conversation between pilot and right seat passenger was strained, and communication with the rear seat was almost impossible. Slightly lower power settings, however, provided a significant reduction in noise, making speaking and hearing a much more pleasant task.

The Skyhawk II's range of equipment added a breath of confidence to assure navigation accuracy on one of those hazy, minimal VFR, eastern summer days. Dual 300 nav/coms, ADF, transponder and full panel offered positive fixes and communications. All the avionics were made by ARC, a Cessna subsidiary, and seemed responsive and accurate.

A second nav/com unit, ADF, and transponder come as part of a "Nav-Pac" option available only on the Skyhawk II. The package cost is \$3,470, but according to Cessna the Skyhawk II with the Nav-Pac radios is priced at \$1,845 less than an equivalent 1972 or 1973 Skyhawk.

A minor, but welcome, improvement in the plane was made in the door latch assembly. The striker plate on the airframe has been redesigned to prevent damage to the plane's skin if the door is slammed shut with the latch left in the open position.

Cessna, with new sales graphs on its Wichita office walls, hopes to sell 2,500 172s and Skyhawks during the coming sales year. Their goals are high, but the plane they are selling has already been proved—and for 1974, improved. □

1974 CESSNA 172/SKYHAWK

Specifications

Empty weight	1,370 lb
Useful load	930 lb
Gross weight	2,300 lb
Baggage	120 lb
Wingspan	35 ft 10 in
Wing area	172 sq ft
Length	26 ft 11 in
Height (nose strut depressed)	8 ft 9½ in
Fuel capacity	42 gal
Oil capacity	8 qt
Engine	Lycoming O-320-E2D, 150 hp
Propeller	75 in., fixed pitch
Wing loading	13.2 lb/sq ft
Power loading	15.3 lb/hp

Performance

Top speed, sea level	144 mph
Cruise, 75% power, 8,000 ft	138 mph
Range, 75% power, 8,000 ft (Standard tanks)	650 mi
Range, maximum, 10,000 ft (Standard tanks)	700 mi
Service ceiling	13,100 ft
Rate of climb, sea level	645 fpm
Takeoff ground run	890 ft
Over 50-ft obstacle	1,525 ft
Landing ground roll	520 ft
Over 50-ft obstacle	1,250 ft
Stall speed, flaps up, power off	57 mph
Stall speed, flaps down, power off	49 mph



The 172's panel shows little change, but its interior has touches of extra plushness.