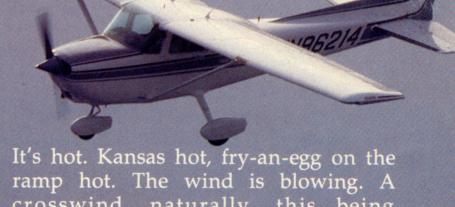
# ACPIOT

...The market for two- and four-seater planes, which, until recently, accounted for half of manufacturer revenues, has virtually died.—Washington Post, August 11, 1983

There are two ways to think about the Cutlass II, Cessna's new 180-hp version of the Skyhawk. You can think of it as the best Skyhawk ever built. Or you can see it as tangible evidence of what's wrong with our lightplane industry.

The views are not contradictory.



ramp hot. The wind is blowing. A crosswind, naturally, this being Wichita. Gusts to 20-plus, occasionally straight down the runway, mostly 30 degrees either side. A wonderful day to check out in the Cutlass II.

N96214 still is so new you can smell the virgin-plastic odor while you do a walk-around. Its Vestal White paint gleams like a TV preacher's teeth, making the C-172Q look pure, wholesome and trustworthy, continued on page 30

# STICKER SHOCK, FUTURE SHOCK, SKYHAWKS

Beyond Ps and Qs

BY STEVEN L. THOMPSON

continued from front cover

the embodiment of the American Way.

Lacagnina wins first-ride honors and straps into the left seat while Jerry Robinson, Cessna's chief flight instructor, climbs in the right. The 180-hp Lycoming O-360-A4N spins two blades and fires. As the panel comes to life, Lacagnina notes that the airplane seems quieter. Robinson points out the improvements: thicker windows, thicker windshield Plexiglas, better sound insulation. He can be heard even in the back seat.

Lacagnina lines up on Cessna Field's narrow, archaic little runway and Robinson repeats his directions for getting out: Climb to 300 agl, crank in a hard right, fly level for a few moments, pick up a certain building below, aim for it and then keep your head on a swivel. Military hot rods from McConnell AFB boom right over your head around here, and Beech Field is only a few miles away. Getting a little airplane like this Skyhawk/Cutlass in and out of Cessna Field is like spurting onto the pit straight with a Chevette during the first lap of the Indy 500.

Easing the throttle forward, Lacagnina starts the pristine airplane rolling. And suddenly, despite the heat, despite the weight of three men and full fuel, N96214 is airborne, climbing as no 160-hp Skyhawk ever did. The VSI needle bumps onto 1,000 fpm.

While Lacagnina, surprised, banks into a turn, Robinson pops his window open and grabs some 80-knot wind. "Nice thing about 'Hawks," he says laconically, "is that limiting window-open speed is the same as never-exceed. Built-in air conditioning."

He grins, and we grin back. Sky-hawks do that to you.

A month and 40 flight hours later, we had rediscovered all the other things that Skyhawks do to and for you. As our first climbout from Cessna Field on that hot day had shown, for instance, we learned the value of the extra 20 hp that Cessna cranked into the C-172 in order to provide Embry-Riddle Aeronautical University's Mesa, Arizona, facility eight "hot and high" trainers. That change-from the C-172P's Avco Lycoming 320 cid carbureted four cylinder to the 360 cid engine-turned the "Skyhawks" into the Cutlass, a C-172 with a Q suffix. The addition of a considerable number of options then transformed the bog-standard C-1720 into the Cutlass II.

Few transformations are painless, though, and the Skyhawk's upgrade from P to Q was not without its downside. How far down that was became apparent when we were handed the airplane's invoice. It took three pages and 56 line items to move from N96214's "list price" of \$62,830 to the bottom line of \$80,132.73.

The airplane's trek to this figure began even earlier, when it became a "Cutlass II". As a stripped "Cutlass" with only bare-bones equipment, it listed at \$52,450, a little more than \$8,000 more than a similarly stripped Skyhawk, so that you could figure each extra horsepower cost four hundred bucks. As many a frustrated Skyhawk pilot can attest, there are times when he'd pay anything to be able to lift the load, clear an obstacle or even get off the field safely, and so you can also figure that the extra money is well spent.

But then there is a creep upwards from \$52,000 to \$80,000. The first long step—\$10,000—upgrades the stripped

Cutlass to "II" quality and involves a lot of equipment you definitely want. Cessna's basic avionics package, which it calls Nav-Pac, includes two 300-series nav and com radios, dual flight controls, pitot heat, true airspeed indicator, an ELT, alternate static source, a 300 series ADF, a 300 transponder and a light package including courtesy lights, the "omniflash" rotation beacon and nav light detectors—those small fiber-optic elements that allow the pilot to check the function of his red and green wing-tip nav lights.

The next big steps come in two leaps: another \$10,680 in avionics and \$2,935 in creature comforts. The avionics include an altitude encoder for the transponder, a 300-series Navomatic autopilot, a 400-series marker beacon, a 400 glideslope, a 300 VOR/LOC head with automatic radial centering, and, most expensive of all at \$4,140, a Collins 450C DME system. The creature comforts provided are fabric seat and sidewall inserts, black carpet, two articulating and reclining front seats (\$435 each), four headrests (\$60 each) and a split-back reclining rear seat for another \$200. Tinted windows, rearseat ventilation system, deluxe (\$155) glareshield, ground service plug, "allpurpose" control wheel with light and approach plate holder, stabilizer abrasion boots and anti-static system fill other important lines on the invoice.

And that, in three pages and 118 pounds over standard empty weight, is how a stripped 180-hp Skyhawk becomes a Vestal White Cutlass II. Is the long and expensive walk through the invoice worth it?

Therein lies the Skyhawk Paradox.

On one hand, the result of the marriage of Lycoming's beefier engine to the familiar Skyhawk produced the best version ever of the airplane. Every pilot who flew N96214 praised it, if not for its less-than-blistering speed, then for its gentle handling, its reliability, its improved comforts, its increased utility and its good fuel consumption. It flew at 11,500 feet on long cross countries, it flew at 1,500 feet on shorter ones. It worked as a trainer, an instrument flying platform and a transport, doing, in short, all those things Skyhawks always do, but doing them all better with such a small fuel-consumption penalty that the extra power more than balanced the extra thirst. As long as the pilot wasn't striving to turn the Cutlass II into a Bonanza, as long



# STICKER SHOCK, FUTURE SHOCK,

SKYHAWKS





as he could keep its designed-in limitations in focus, he could just flat love the thing. No airplane we've had on extended lease has ever performed with so few squawks; a faulty audio panel switch was the sum of them. It hardly burned any oil—despite being brand new—and turned in fuel burns consistently smack on book figures. (We ultimately decided that around 9.5 gph was a useful ball-park planning figure for N96214's trips.)

In contrast with this performance, was the dismal record of a P-210 we also had in hand; it not only would not perform according to book, but it would also peg its cylinder head temperature and oil temp gauges on any kind of climb, and on one occasion would not make it above 10,000 feet. This was a new airplane.

As much as anything, this contrast may underline the validity of the KISS syndrome—Keep It Simple, Stupid. Cessna has been building Skyhawks for a long, long time; the workers ought to know how to put one together by now, the cynical view would suggest. But whatever the reason, N96214 worked beautifully, the embodiment not only of the American Way but also of the Perfect Skyhawk. You could fill your tanks (alas, only the

50-gallon versions, not the 62-gallon long-rangers), still have 640 pounds left for people and baggage and have some certainty that you could achieve book figures for climbout. The word for this airplane around the *Pilot* offices became "honest." Everybody liked it.

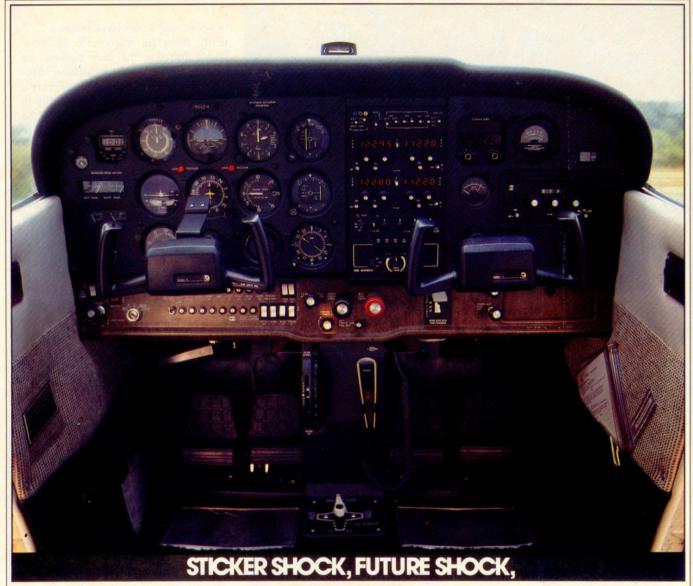
But nobody liked its price. As soon as the subject came up, the honest little Skyhawk became a pathetic example of how skewed values have become. Certainly, there are reasons for the inexorable inflation that has marked the decline of Wichita's lightplane sales with a matching upward cost curve. And certainly, there is some validity to the often quoted chant from Wichita that "airplanes cost relatively little more now than then." (Mark Lacagnina examines these issues in detail in the accompanying story, "Skyhawks Then and Now," p. 43). But still the bottom line remains; and for this combination of old hardware and new paint, it still is \$80,000.

What can we expect for this kind of money? Boil down the matter to numbers; for this much we ought to get more than 1961 performance—but we're not. The comparison is often made between airplanes and carsspecifically, between the cost increases. And indeed, cars have increased dramatically in cost. But so have their performance levels; today's buyer can expect an automotive product with fundamentally better "systems" than its two-decade-old counterpart. Today's fleet steers, handles and goes better than yesterday's; this is value for the buyer's money.

This Cutlass, on the other hand, is not a quantum leap anywhere from its ancestors. The same radios, seats—even engine—could easily be bolted in yesterday's airframe to produce much the same performance available from today's. And so the elements of the paradox come together.

Why does this airplane exist? First, because flying is a game of odds, and





the odds are that a Skyhawk will do what you want-what you expectwhile not putting you at great hazard. You can fly in reasonable comfort, because the new seats with added lumbar support really do make a difference on those three-plus-fifty legs common to Skyhawks, although lateral support is still a weak area. And you can hope to make around 110 knots groundspeed on your trip if the winds aren't hopeless. (We saw everything from 136 to 89 knots DME, with E-6B verifications at the same-75 percent-power settings.) Second, it exists because as a class, Skyhawks have proven themselves perennial best sellers. And as other manufacturers in other industries have discovered, it is often harder to change a known-if-flawed product than it is to change a "formula" product. The risk often seems to outweigh any improvement. (This has slowed down replacement of such diverse

## **SKYHAWKS**

items as VW Beetles, Harley-Davidson Sportsters, BMW opposed-twins and successive versions of Chevrolet Corvettes.) In marketing terms, this boils down to "If it ain't broke, don't fix it."

It doesn't matter if the engineers don't like a product. If the buyers like it, the company likes it.

But something odd has happened even to the best-selling Skyhawk. It isn't, these days. These days, the whole general aviation bazaar is upside down. The phenomenon hasn't even escaped the notice of periodicals such as the Washington Post and the Wall Street Journal, in whose pages considerable concern has been expressed for the state of small-aircraft aviation, usually as a result of the plunge in sales of Skyhawk-class aircraft. The message your average business editor seems to draw is that "Flying Is Dead." The

view from these offices and cockpits is rather different, although the view takes in the same sales plunge.

There is a market for two- and fourseat aircraft. You can find it, among other places, in the pages of such journals as Trade-A-Plane, where Skyhawks are not selling for 80 or 60 or even 40,000 dollars, regardless of equipment. Positing it this way may seem absurdly simplistic, but consider the possibility that each level of utility in a given piece of hardware is worth a given, market-generated amount of money. Consider it a kind of pure demand/supply cycle. Then consider the effect of unchanging, fundamentally unimproved "new" models of products for that cycle, year after year, and you get the outlines of why people are staying away from 80-grand Skyhawks and similar aircraft in droves.

It isn't because the Cutlass is not a good airplane. And it isn't because the

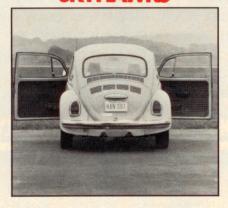


# STICKER SHOCK, FUTURE SHOC

market doesn't want the smell, taste and feel of a "new" airplane. It may be simply that the industry wizards who prophesied a decade ago the demise of the "private flier and his little airplane" have done their best to make it so, by allowing their best products to lie unimproved while they sunk their R&D money into glamorous, upscale projects, and who continued to 'prove" that building small aircraft was ultimately unprofitable by citing the falling sales trends of their evermore expensive hardware. In sum, a self-fulfilling prophesy.

But the whole prophesy stubbornly refuses to come true, as the Cutlass rather surprisingly proved to us on each of our cross countries. Without exception, each of the legs rewarded us with a ramp conversation with someone who noticed the "differentness" of the C-1720-differentness that is limited to the bulge of the bottom cowling and the size and shape of the airbox inlet. You may choose to interpret such interest in the C-172Q as the coincidental collision with the only true airplane degenerates of each airport; we do not. We choose to understand it as hope—hope for a new airplane, a new, less costly solution to the problems of this market segment.

So far, the potential market for the



Cutlass II seems already to have decided that it is not going to be the solution to those problems. Skyhawk Pmodels currently outsell Q-models by almost ten to one. (By comparison, Piper has sold almost as many 180-hp PA-28s as it has 160-hp versions since the higher-power model became available.) Whether this is the result of some lingering bad memories of the 1977 to 1981 195-hp Hawk XP variants or whether it is some further quirk of the bizarre current sales pattern, it is a shame, because the airplane deserves to be known as a worthy Skyhawk.

There is, in the end, more going on here than simple sticker shock. Russell W. Meyers, chairman of Cessna Aircraft Corporation, recently noted that because of the complexity of "finishing" today's airplanes, even a simple fixed-gear, fixed-pitch single such as N96214 involves a great deal of very expensive hand labor. By this he was no doubt referring to more than tinbending; he was talking about wiring, about interior work, about rigging. And after he noted this, he went on to speak of research into ways of reducing this overhead. A few months after he spoke, his Pawnee Division built N96214, which contains no improvements in fundamentals. And a few weeks after that, Pawnee shut down, the result of a market-that's pilots, operators, buyers-sending a message the only way it could.

The message, we believe, has not a little to do with the thinking that brought us the Cutlass II and its attendant Skyhawk Paradox. The message does not speak of dying markets but of unmet needs, and when we listen to the pilots who send the message, they say things like, What we need isn't just a better Skyhawk. What we need is a better airplane.

It's possible that this message of lightplane life has been heard in Wichita. The question is, were they too distracted by the expensive whine of a Citation III to understand it?

Specifications and Flight Notes continued on p. 38

# STICKER SHOCK, FUTURE SHOCK,

# FLIGHT NOTES: C-172Q N96214

The accompanying story centered on the new Cessna Cutlass II doesn't delve very deeply into the systems or performance of the newest Cessna single. This is not an error of omission; the fact is, so ubiquitous is the Skyhawk, and so generally exemplary was this particular Skyhawk's performance, that the spec sheet, for once, tells almost the whole story of the airplane.

Staff pilots, of course, had differing opinions about that performance, and about the airplane. In general, the biases apply equally to all Skyhawks in the staff's experience, but some were peculiar to N96214. Among them were:

- · A common dislike of the 300 series Navomatic autopilot. In the navigational tracking mode, it would drive the Cutlass in annoyingly wide sweeps as it sought to capture the VOR signal. Usually, the result wasn't worth the effort, and we flew the heading bug, a much less wobbly way to maintain a desired ground track. As a wing-leveler, the Navomatic seemed acceptable, since it corrected, in the lateral trim mode, a constant port-wing-low condition.
- The lack of rudder trim. In such a fully optioned aircraft, rudder trim would seem natural.
- The Collins DME readout-a lightemitting diode display-was too dim by a considerable factor. Although driven by a photocell, the display always was difficult to read, even at night, and was angled badly for the pilot.
- The starboard aileron developed a rough, grinding feel early in our lease, and although it never worsened, did not provide us with much peace of mind. Visual inspection of the cables revealed no fraying, except, occasionally, of the crew's nerves.
- · The vinyl towbar retaining strap in the aft baggage area seemed about an inch too short, which meant the "proper" stowage procedure usually was shortcut.
- · The carburetor heat control was never easy to operate, becoming more and more difficult to open fully as the month wore on. It never ceased to function entirely, but like the wildly erratic fuel pressure readings obtained when the electric fuel pump was engaged, it did not promote confidence in its value in an emergency.
- · Despite different combinations of boom microphones, hand mikes and pilots, the ARC 300 com radios consis-

tently seemed to generate a weak signal. Air traffic controllers from Indianapolis to Atlanta continually requested repeat transmissions while the aircraft was operating at all altitudes from 11,500 feet to 1,500 feet agl.

Offsetting these annoyances were the traditional Skyhawk virtues. In case there lives an American-licensed pilot who has not sampled those virtues, they

· Absolutely straightforward handling characteristics. After the sudden breaks of a Piper Tomahawk or a C-152 stall series, the Cutlass will seem to any newly licensed private pilot to be a piece of cake in the mushy corner of its envelope. Although it requires considerable rudder work to maintain a wings-level attitude as the stall is approached, Skyhawks generally-if properly riggedwill not depart, but will wallow and finally pitch straight nosedown. N96214 was no exception. In normal flight, this means that the leisurely roll responsessome people call Skyhawks "Skytrucks" because of this trait-induce fewer pilotinduced oscillations.

Except, that is, in landing, where the unwary can find the Cutlass' nose suddenly too far down, asking for a wheelbarrow incident. The proper cures are to adhere strictly to the numbers-Jerry Robinson calls for 68 knots over the fence-and to rotate the nose so that the cowling seems to rest on the horizon. If you do this right, you'll get a greaser every time, but as we discovered all over again with this Cutlass, it's very easy to overcontrol a high-wing, low-wingloaded Cessna in the final moments of the flare. This Cutlass seemed especially light and sensitive in pitch, exacerbating the potential problem.

• In cruise flight, the Cutlass was docile. It liked to be eased over the top at its assigned altitude with a very small pitch adjustment, and power setting had a considerable effect on its attitude. Sans rudder trim, use of the Navomatic in asymmetric load configurations and continual pitch trim changes were necessary to ensure efficient cruise.

The cumulative effect of the good and the bad is easy to sum up: N96214 is a Skyhawk that is a little quieter than yesterday's, that climbs a little better than the 160-hp version and cruises within the same envelope as its lower-powered stablemate.

#### Cessna C-172Q Cutlass II

Base price \$52,450

Price as tested \$80,132.73

AOPA Pilot Operations/Equipment Category\*

Cross-country \$65,830 to \$67,360 IFR \$78,660 to \$81,130

#### Specifications

Powerplant Avco Lycoming O-360-A4N 180 hp @ 2,700 rpm

Recommended TBO 1.800 hr Propeller McCauley 2-blade, fixed pitch, 76 in

Length 26 ft 11 in Height 8 ft 11 in Wingspan 36 ft Wing area 174 sq ft Wing loading 14.7 lb/sq ft Power loading 14.2 lb/hp Seats 8 ft 7 in Cabin length Cabin width 3 ft 3 in Cabin height 4 ft Empty weight 1,513 lb Empty weight, as tested 1,617 lb Max ramp weight 2,558 lb Max takeoff/landing weight 2.550 lb Max useful load 1.045 lb Useful load, as tested 941 lb Payload w/full fuel 745 lb Payload w/full fuel, as tested 641 lb

Fuel capacity,

Fuel capacity, std

408 lb (396 lb usable) w/opt tanks 68 gal (62 gal usable)

316 lb (300 lb usable) 54 gal (50 gal usable)

Oil capacity, ea engine 120 lb, 15.8 cu ft Baggage capacity

#### Performance

Takeoff distance, ground roll 860 ft Takeoff distance over 50-ft obst 1.520 ft

Max demonstrated crosswind

15 kt/161 mph component Rate of climb, sea level 730 fpm Cruise speed/Range w/45-min rsv,

std fuel (fuel consumption, ea engine) @76% power, best economy

6,000 ft 120 kt/470 nm (60.6 pph/10.1 gph)

Service ceiling 17,000 ft Landing distance over 50-ft obst 1.335 ft Landing distance, ground roll 575 ft

Limiting and Recommended Airspeeds Vx (Best angle of climb) 62 KIAS 73 KIAS Vy (Best rate of climb) Va (Design maneuvering) 105 KIAS

110 KIAS

48 KIAS

Vfe (Max flap extended) Vle (Max gear extended)

Vno (Max structural cruising) 127 KIAS Vne (Never exceed) **158 KIAS** Vr (Rotation) 55 KIAS Vsi (Stall clean) 53 KIAS

Vso (Stall in landing configuration)

All specifications are based on manufacturer's calculations. All performance figures are based

on standard day, standard atmosphere, at sea level and gross weight, unless otherwise noted. \*Operations/Equipment Categories are

defined in June 1983 Pilot, p. 96. The prices reflect the costs for equipment recommended to operate in the listed categories.

# A THEORY OF RELATIVITY

# SKYHAWKS



The Skyhawk fits like an old shoe, but who wants to buy an old shoe at today's prices?

BY MARK M. LACAGNINA

It was nearly midnight when we landed at Indianapolis. The day had started with the hustle and grind of airline travel; and by contrast, the first legs of our ferry flight in the Cessna Cutlass had been pleasurable and relaxing. Yet, the day had taken its toll, and we decided to stay overnight and get a fresh start in the morning.

The silence on the ramp was broken only by the occasional whine of a passing airliner. The lineman at CombsGates seemed to be the only other living soul around at that time of night. Then, surprisingly, a young man came trotting out of the darkness, smiled a hello and began asking questions about our airplane.

"Is this a new Skylane?" he asked.
"That airbox sure looks a lot different."

Steve Thompson told him it was the new, fixed-gear Cutlass—a sort of Super Skyhawk. The young man studied the airplane with enthusiasm while pumping us for information on cruise speeds and so forth. In the darkness and in our stage of fatigue, his enthusiasm was refreshing.

Then he asked the price. I said that, as equipped, the airplane cost a little over \$80,000. The young man looked at me as if I had delivered an insult. He shrugged, nodded farewell and trotted back into the darkness. His smile had vanished, leaving Thompson and me feeling somewhat depressed.

At the hotel, before drifting off to sleep, I thought about a similar incident that had occurred about 50 miles north of Indy about a year earlier.

It had been a beautiful day, with a bright, blue sky punctuated with innocuous, puffy white clouds. I had taken my 16-year-old brother-in-law up in a Piper Arrow for his first flight in a lightplane. His features were alight with enthusiasm and interest. With a little coaching from me, he held the Arrow straight-and-level with aplomb and did a creditable job of climbing and descending turns and rudimentary VOR tracking.

I was just beginning to think the flying bug had bitten him hard when he started asking about costs. I told him the Arrow cost slightly more than \$100,000, as equipped, and that it would cost about \$2,000 to get a private license and about \$10,000 more to prepare for a career as a professional pilot. The lights dimmed, and he appeared genuinely astonished.

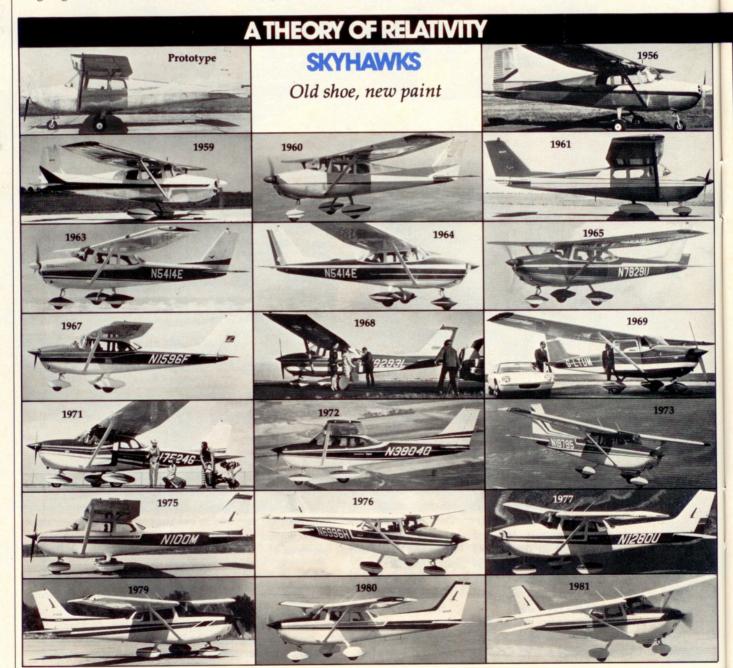
Uncharacteristically, I found myself on the defensive, trying to make sense out of what apparently was unbelievable. I told him that most pilots have to make sacrifices to fly; that I had sold a beloved classic sports car to finish my initial training.

Sure, learning to fly when I did cost much less. But I pointed out his \$30 designer jeans and noted that when I was his age, I used to pay only about \$3 for a pair of can't-bust-'em bellbottoms. I came up with some other comparisons, but they rang hollow even in my own ears.

My personal theory of relativity just did not cut the mustard. My brother-in-law had demonstrated an obvious talent for flying but had come to the conclusion that it was just too darned expensive. Someday, maybe. . . .

It seems that almost every nonflier would like to learn to fly someday—meaning when they can afford it.

Are the costs of flying beyond the reach of the average person? I think not, because the graybeards will tell us they had to sacrifice plenty to earn



their wings back in the 1930s. It is a matter of dedication—of assembling one's priorities.

But there is no denying that flying—like skiing, boating and trying to keep an old sports car on the road—is expensive. If we were to list the cost-driving forces in aviation, we probably would put the prices for new aircraft and for aviation fuel at the top of the list. At first gasp, they are incredible. But how do they stack up against the costs of other consumer items? Have they accelerated beyond the inflationary spiral?

According to the U.S. Department of Labor, the consumer price index has more than doubled in the past 10

years—from 133.1 in 1973 to 289.1 in July 1983, a 117.2 percent increase.

A run-of-the-mill family automobile cost about \$5,500 in 1973. Today, a similar car, albeit much improved, costs about \$10,000. During the same time, the price of a pack of cigarettes rose from 35 to 80 cents.

Some consumer items, especially electronic equipment, have not kept up with the march of inflation. A color television that cost \$588 in 1973 would cost only about \$600 today.

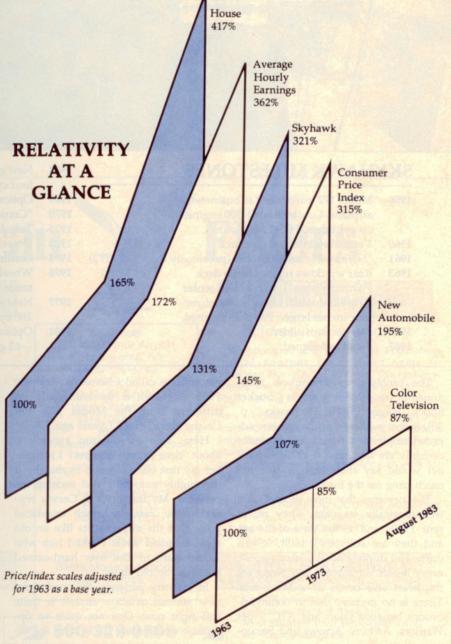
The prices of some items have outpaced inflation. A house that cost \$34,000 in 1973 now would cost about \$85,000. A gallon of leaded, regular automobile gasoline has tripled in

price, from about 52 cents in 1973 to \$1.50 this year. The price markings on aviation fuel pumps have shown similar increases. In 1973, a gallon of 80-octane avgas cost about 67 cents; 69 cents for 100 LL. The average prices now are about \$1.95 and \$2.00, respectively.

General aviation airplane prices, too, have accelerated beyond the inflationary spiral, but not as much as houses and fuel. The base price for a Skyhawk, for example, was \$15,676 a decade ago. Now it is \$38,450, or about 2.5 times higher.

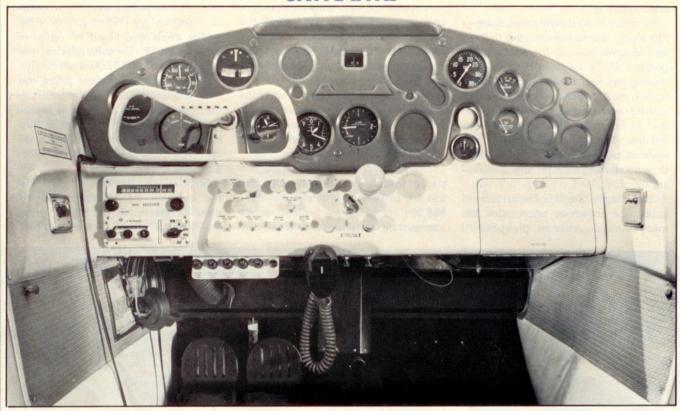
So, it appears from these figures that the airframe manufacturers are not quite as greedy as the sticker prices on their airplanes might suggest.





## A THEORY OF RELATIVITY

### **SKYHAWKS**



### SKYHAWK MILESTONES

		four cylinders, TBO 2,000 hours.
Model 172 introduced as businessman's	1969	Optional 52-gallon tankage offered.
airplane. Continental O-300 engine, 145 hp	1970	"Conical-camber" wing tips added.
six cylinders, TBO 1,800 hours.	1971	Tubular strut landing gear put on.
Vertical stabilizer swept back	1972	Dorsal fin added.
"Skyhawk" name adopted (previously the Model 172)	1973	Leading edge of wing reconfigured.
Rear windows replace turtle deck	1974	Wheelpants added and modification
("Omni Vision"), windshield center		made to cooling airflow.
strip eliminated. Elevator, stabilizer	1977	New engine: Lycoming O-320H,
four inches larger. Panel redesigned.		160 hp (100LL engine).
Electric flaps added.	1981	Optional wet-wing fuel system
Panel redesigned.		-62 gallons - offered.
	airplane. Continental O-300 engine, 145 hp six cylinders, TBO 1,800 hours.  Vertical stabilizer swept back "Skyhawk" name adopted (previously the Model 172) Rear windows replace turtle deck ("Omni Vision"), windshield center strip eliminated. Elevator, stabilizer four inches larger. Panel redesigned. Electric flaps added.	airplane. Continental O-300 engine, 145 hp six cylinders, TBO 1,800 hours.  Vertical stabilizer swept back "Skyhawk" name adopted (previously the Model 172) Rear windows replace turtle deck ("Omni Vision"), windshield center strip eliminated. Elevator, stabilizer four inches larger. Panel redesigned. Electric flaps added.  1970 1971 1972 1973 1974 1977 1977 1977 1977 1977 1977 1977

The problem, as Thompson mentioned in the preceding article ("Sticker Shock, Future Shock, Skyhawks," p. 30), is that while prices have been adjusted amply for inflation, the airplanes certainly are not new. A chicken colonel would say that there is just not much bang for the buck.

The airplanes that most of us fly are technologically stagnant. They represent 1940s and 1950s state-of-the-art, and they are still being built, laboriously and imprecisely, by hand. Inside every Beech Sundowner and Sierra are the heart and bones of a Musketeer. There is no mystery that in communications between pilots and ATC, Piper Warriors, Archers, Arrows and Sarato-

gas still are called Cherokees. And the 1983 Skyhawk is fundamentally no different from the Model 172 that Cessna introduced 27 years ago.

Here, we can get into arguments about "time-proven designs." I remember my first checkout in a Skyhawk—a thoroughly enjoyable and exciting experience. My instructor, a Cessna representative, remarked with misplaced pride that the airplane fits like an old shoe. I smiled while I asked him who would want to fork over hard-earned bucks for an old shoe?

In industry parlance, the market for new general aviation aircraft is quite soft right now. One not quite so optimistic would more likely term it a disaster area. When sales began to plummet a few years ago, the industry said the situation would improve as soon as the economy began to improve.

New engine: Lycoming O-320E; 150 hp,

The economy has begun to improve, but aircraft sales have fallen below rock bottom. Now, the industry says not to worry, improvement in the market for new airplanes always lags behind the economy.

This appears about as sound as my theory of relativity. It ignores some very critical considerations. But of one thing I am sure: If we could bring a 1973 Chevrolet Impala through a time warp and onto the floor of a new-car showroom, nobody would shell out ten grand for it.