THE CHARGE OF THE CENTURION

The price and rewards of the P210's performance

BY RICHARD L. COLLINS

PHOTOGRAPHY BY MIKE FIZER

There's a truth about operating complex airplanes that has to be repeated when pondering the cost of flying them. The operating cost of a used airplane is directly related to what the airplane would cost new today, not to what you pay for the airplane. Try as we might to ignore inflation when it comes to flying, it is real; though in some areas, aviation costs have actually been lower than inflation.

The airplane that I have had for almost 13 years, a Cessna P210, listed for just under $150,000. Adjusting for the inflation that has halved the value of a dollar in the past 13 years escalates that to $300,000. So I am maintaining a $300,000 airplane, not a $100,000 airplane, which is what it is worth now, used. Parts prices have more than kept pace with inflation. Good news for the owner of an airplane that is a gasaholic is that in 1979, I paid $1.25 for gas at my home base; now I pay $1.94—far behind inflation. Same goes for hangar rent—$192 a month then, $250 now. Labor in the shop also lags far behind inflation at $35 per hour now and $24 then. Oil is relatively a little cheaper at $2.35 now versus $1.35 then, but filters have just about kept up with inflation at $14.50 versus $7.50.

Given everything, the basic cost of operating the airplane might actually have decreased a bit over its life when inflation is considered. There is another factor, though, that has to be considered—age. Airplanes are just like people in requiring more care as they get older. An airplane has a lot of parts, some of which you replace or overhaul on a scheduled basis, like the engine and propeller. This is a pricey affair on a turbocharged airplane; doing everything forward of

the firewall on one with a Continental TSIO-520 goes up or down a bit from $30,000, depending on whether you overhaul, exchange for a factory-remanufactured engine, or exchange for new. This you can budget, with the primary upset coming if an engine doesn't make it to TBO. Even then, a good warranty can come to the rescue. Other things you care for on an on-demand basis. As an airplane gets older and builds hours, it reaches a point where the parts owe you nothing and demand more. You, or a previous owner, have gotten the money's worth from them. These are the things that can load the maintenance cost of an airplane as it gets older. I used to allow for one $2,000 surprise a year. Now they run more like $3,000 and happen more often than once a year.

The costly items that I have running now that owe me nothing (and that I fervently hope are still running when you read this) are things like the HSI (3,800 hours), the deice boots (seven years), the magnetron in the radar (3,800 hours), and the electric hydraulic pump (5,800 hours).

I would add that deicing equipment is expensive to maintain. The electrically heated propeller is generally unreliable on singles because, when someone pulls on the inboard section of a prop blade, they are pulling on the heating elements. No, they shouldn't pull on the prop, but you can't sleep with the airplane, so you wind up replacing elements rather often at maybe $700 for all three. The windshield heating unit is one of the big expensive surprises. The boots have a finite life, though if you treat them as recommended by BFGoodrich and hangar the airplane, they should last as long as 10 years before respectfully requesting 8,000 of your dollars. To have them to use while you get the airplane out of icing conditions as quickly as possible costs money but is nice when the time comes.

The metal part of my airframe until recently required little maintenance. The cowl flaps have demanded some work over the years; the nosewheel has had to be convinced not to shimmy maybe three times; the saddles in which the main gear legs rest when extended have been replaced; a few loose rivets have been replaced and a couple of patches cover cracks in the horizontal tail; and there's a patch on the fuselage where a poorly installed antenna caused a crack. The throttle assembly had to be replaced, and one of the little reservoir fuel tanks sprang a leak and had to be replaced. The hinge in the baggage door came loose, but that was more a manufacturing problem than an aging problem.

It wasn't metal, but one cabin window had to be replaced (for almost two grand). And other than the replacement of a couple of boots on gear actuating rods, there has been no other maintenance related to the fact that the airplane is pressurized.

That is a short list for 13 years and 5,800 hours. The plot thickens, though. I found corrosion on the trim tab, and it had to be replaced on the last annual. There are service letters on other parts of the tail, and if certain things are found back there, the horizontal tail might have to be re-ribbed. Corrosion could dictate a re-skinning of the elevator. The attach fittings for the horizontal tail are also the subject of a service letter and might have to be replaced. I am careful not to run the engine at high rpm on the ground (except for takeoff) because of the way it shakes the tail, and so far, none of the service letter problems have developed on my airplane. I still have to face the fact that the tail reserves the right to lay claim to a large chunk of dough and may do so at some point. I have yet to have the courage to ask how large that chunk of dough might be. This is not just a 210 event; the tails of a lot of other general aviation airplanes have service letters as well as ADs, and before you attach one to your checkbook, best look carefully into the requirements of the tail.

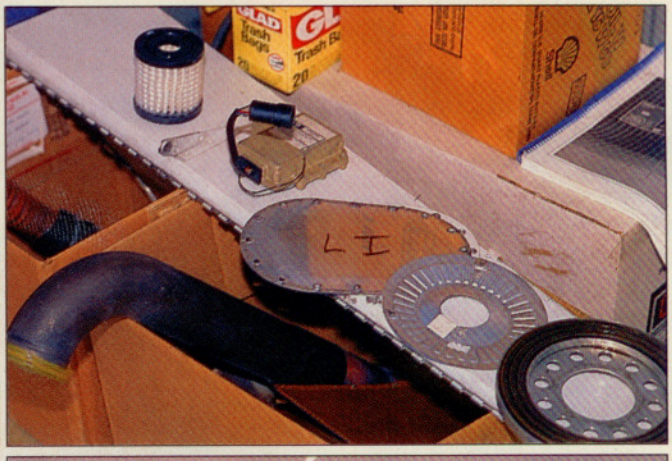
The annual inspection is always an expensive event and not, in the 13 I have had on the airplane, to any good end. Very little of what has been fixed on the airplane was discovered on the annual. Were it not for the FAA's requirement for this, I would be perfectly happy to fly the airplane on the basis of replacing certain items at prescribed intervals and telling the shop what to look at and for and what to fix. I feel that the annual, for an airplane that is continually well maintained, does more harm than good, and the flat fee usually charged for an inspection is a ripoff. On the other hand, for an airplane that is not continuously well maintained, the annual is probably all that saves the bacon.

Rolling the P210 out of the hangar is a regular experience for Collins. (Top right) The proud new owner in 1979. Just below is the same proud owner, same airplane, and even the same suit and tie 13 years later. Dick still has his original parts; the airplane doesn't.

Which brings us to the bottom line. Some question a statement that I have made in the past about a well-used airplane costing four times the price of the fuel to run. At $1.94 per gallon and 17 gallons per hour average, the four-times theory suggests $131.92 per hour to fly my airplane. Last year, it cost $123.56 per hour for 328 hours. Two thirds of the money was spent for fuel and maintenance. The cost is ahead of that this year by quite a bit because of an excess of surprises, which includes some expensive pieces

of exhaust pipe and two gyros. Fortunately, it flew through the last half of last year on compression checks, plug cleanings, oil changes, and some relatively minor items.

When you take some of the expensive options out of the airplane, you might run it for less than four times the price of the fuel. Not a lot less, though. In the 5,800 hours that I have flown this airplane, the cost of maintaining the pressurization, the deicing, the radar, and the additional cost of maintaining and feeding fuel to the turbocharged engine has added about $12 per hour to the cost of operation, or about 10 percent. That is a small price to pay for a lot of added capability. It does not count the amortization of the additional initial cost of the airplane, but I won't really know that amount until I sell the airplane or put it atop my new gas station.



The 13 years that I have had the airplane bring some more good news. It is paid for. The question is, does the additional maintenance burden caused by age result in the same outbound cash flow that existed while I was making payments? At times, it seems so, but the truth is that it does not. A review of records shows that the airplane cost $80 per hour to fly in 1979 (which, incidentally, was four times the price of fuel), and with 100-percent inflation, it is up only 56 percent. If my tail decides to want all the possible fixes, though, who knows. □

Richard L. Collins is a former editor in chief of AOPA Pilot *and* Flying *magazines. He currently is a contributing editor and consultant to* Pilot *and a consultant to Sporty's Academy, Incorporated. Over the years, he has owned 11 different aircraft and written 11 books about flying.*