

If a mechanic does a slipshod job or an inspector fails to spot a defect and certifies that an airplane is airworthy when it isn't, what can the aircraft owner do?

This kind of problem, of course, is not peculiar to the aviation industry. Automobile owners may well face a similar difficulty when dealing with mechanics, the difference being mainly one of degree. Mistakes made in

aircraft maintenance generally have more serious consequences than they would have for an automobile, but not necessarily so. A brake failure on your car might be much more serious than many failures that can occur in the aircraft mechanism.

There are differences, however, between the duties and requirements of an aviation mechanic and those of an auto mechanic. The aviation in-

dustry is not only minutely regulated, it is minutely regulated by the Federal Government rather than by the states, and because of this, the analogy between the two breaks down.

We start with a principle generally prevailing in the law that one who claims to be qualified to undertake a particular job assumes the responsibility for doing that job in an adequate and workmanlike manner when he is hired. The airframe and powerplant mechanic (A and P) is subject to this rule of law. If he fails to do a piece of work for you in a proper and workmanlike manner or if in this work he is negligent, he is then liable to you for the consequent loss you may suffer.

In an unregulated field such as the maintenance of passenger automobiles, it is often a matter of opinion whether work is done in a proper and workmanlike manner and whether a mechanic has been negligent. It cannot accurately be determined by measurements or formulas. There are industry standards, but they are not readily available to the average automobile owner.

In aviation it is wholly different. Standards are fixed by the Federal Government. They are public information and readily available. There are rules and requirements by the score that fix the standards to which the A and P must conform and they even specify methods which are required. There are limits on the tolerances that are permitted with respect to various moving parts. Welding techniques are specified and so one could go on and on. The point is that much of this is not a matter of opinion but a matter of standards specified in writing by the Federal Government.

Furthermore, the aircraft owner need not rely wholly on testimony of his own experts. Repairs and certain maintenance operations on aircraft must be able to pass inspection. The Federal Government is the ultimate expert with whose determination the aircraft owner must comply. In view of this, the aircraft

owner is entitled to have an expression of the Federal Government's opinion by the way of an FAA agent or inspector. This assistance is not available to the automobile owner.

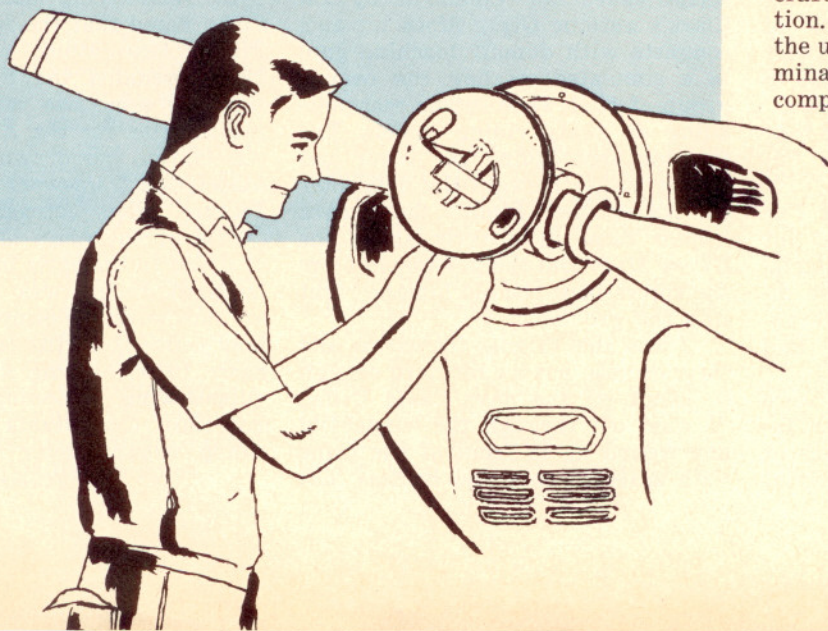
What about the inspector who provides you with the periodic or annual inspection? In addition to the fact that the aircraft owner is entitled to rely upon a person certificated by the Federal Government for the competency of maintenance, repairs and

*The same Federal laws that require you to keep
your airplane airworthy protect you against
shoddy workmanship or careless inspections*

The Mechanic's Responsibility

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alterations done to his aircraft, the aircraft owner is also entitled to rely on certain persons for inspections. The rules require that the aircraft pass certain inspections before it can be lawfully operated. These inspections are discussed in Section 43.22 of Part 43 of the Civil Air Regulations. Part 43 contains the general operation rules.

It is not the purpose of this article to discuss the various rules, so we shall refer only to the periodic inspection. With respect to the responsibility of the persons doing the inspection, our discussion of the periodic inspection will apply for the most part to the other types of inspections.

Section 43.22 makes it unlawful to operate an aircraft unless within the preceding 12 calendar months it has been given a periodic inspection. There are two exceptions to this requirement, but these are immaterial to our discussion. The periodic inspection must be made in accordance with the rules contained in Part 18 of the Civil Air Regulations. The aircraft must have "been approved for return to service by a person authorized by Section 18.12(b)." Section 18.12(b) requires the periodic inspection to be made by an A and P holding an inspector's authorization, and appropriately rated certificated repair station or the manufacturer holding the type certificate for the aircraft, who is operating under an approved production inspection system or a production certificate.

In addition to the requirement for this periodic inspection, the rules provide that such inspection must be made in accordance with procedures prescribed by the Administrator. Section 18.30(c) and Section 18.23 require that these periodic inspections be entered on a form prescribed by the Administrator and the Administrator prescribes the disposition to be made of these records. They are required to be kept available for use and inspection for a reasonable length of time.

The law obliges the aircraft owner to make sure that his aircraft meets certain requirements specified by the Federal Government. It also provides that certain persons be authorized to determine whether the aircraft meets these requirements, and that certain records be kept with respect to the required inspections. Such records will show whether the aircraft meets the requirements of the law.

This creates certain rights and duties beneficial to the owner. The law in imposing obligations on the citizen

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ably received their initial training in.

Another factor to be considered in outwitting a mousetrap is that most breaks in overcasts large enough to tempt a letdown are not likely to be perfectly round. Do not let length sucker you. Unless it is clearly long enough to allow you to get down without making a single turn, width is the only dimension that counts.

However, even if the pilot has an accurate feel for his turning width and picks a hole large enough to accommodate an off-center spiral, he may still push the panic button and come to grief by trying to come down too quickly. He can lose his wings even though remaining clear of clouds. Could such a concept explain some aircraft which seemingly crashed or disintegrated without reason? Broken clouds changing rapidly to scattered at the time of an accident could easily lead investigators into thinking that weather was not a factor, particularly if the exact time of the crash could not be pinned down. What an insidious weather killer it is who lures his victims into a position where their own natural reaction is to make an extreme attitude even more so, thereby putting themselves into a graveyard spiral even before entering any clouds!

The holes that are most dangerous are naturally the deep ones with high walls, and fortunately such conditions are only rarely encountered. With a thin cloud sheet you can pop right through a hole in a normal glide with nary a turn. But if there are several thousand feet, it will probably take roughly a minute and as many as four complete turns. Also remember that in a tight turn stalling speeds go way up.

You can blunder into the sides of a cloud canyon just as easily going up as down, more easily in fact, as it is impossible to turn nearly as tightly and still gain altitude. It also takes longer to get up on top than to come down, which also increases the risk. Once on top you face the problem of getting back down at your destination.

In climbing or descending through breaks in stratus or broken tall cumulus, an AOPA 180° rating might well wind up being a lifesaver, but remember it's a last ditch emergency measure for a situation you shouldn't be in. Don't treat it as an invitation to steal the cheese, because only a wise and cautious consideration of all the aspects discussed here—or a full instrument ticket and the ability to use it—can take the snap out of the trap. END

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at the same time creates certain rights that accrue to the citizen if he abides by the obligations. And the law, in giving to certain specified persons the exclusive right to perform certain acts, imposes upon those persons corresponding duties and responsibilities.

While it is true that the rules and requirements we are now discussing are valid only insofar as they relate to safety, they of necessity, like most safety regulations, have an economic significance. When we buy an aircraft we are entitled to place reliance upon not only the maintenance and repair records signed by the A and P, but also on the periodic inspections and on the persons certifying to them. A thoughtful and cautious aircraft purchaser furthermore makes some investigation concerning these items before making a purchase.

The net result of all this is that the aircraft owner, in addition to the right to hold the A and P to specified requirements and standards of performance fixed by the Federal Government with respect to maintenance and repair work for which the owner contracts, is also entitled to assistance from the inspectors employed or designated by the FAA to make inspections. We are entitled to the assistance of the inspectors whether we are the owner of the aircraft or a purchaser or prospective purchaser. Just as we may expect help from the FAA with respect to whether a mechanic has done work in compliance

with the standards specified, so we may expect help from the FAA when we rely upon a periodic inspection report. We are entitled to have the FAA determine whether the inspector has conducted his inspection in accordance with the law.

It seems to me that the same general principles of law which apply to the mechanic, the A and P, should also apply to the inspector. Since the government has prohibited us from flying a plane unless it has passed inspection by an inspector employed or designated by the Federal Government, it would seem that we should be entitled to rely upon that inspection and if the inspector is negligent and his negligence causes a loss to us, we should have the right to hold him liable and, as an agent of the Federal Government, hold also the Federal Government. While it is my opinion that this is a proper interpretation of the law, I warn you that the FAA does not consider this the proper interpretation. I shall not undertake to state their views. I have found no case which in my opinion is conclusive of the issue, but do consider that the cases involving control tower operators are persuasive in support of my view.

Summarizing this, I think it fair to say that we as aircraft owners are subjected to detailed regulation by the Federal Government. This is a fact whether we like it or not. (Incidentally, I see no move on the part of either political party to change this.) Since this is the law, we should take full advantage of the benefits which are created in our favor by these laws.

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