

Paperwork - Ugh?

By Chris Hope, Master CFI

Airplane Ownership – Why do we own when we could rent? Perhaps it is because the airplane that we love so much just is not available for rent. Where can we find a pristine T-craft or Ercoupe, or maybe that Baron that just exactly fits the mission? Or maybe it is because that even though there might be a half dozen rental aircraft parked on the ramp that might work for us, there is a lot to be said for parking our own aircraft in the hangar and knowing that it will be the same when we come back in a week – the headset will be in the same place, the charts will all be folded, ready to go, and all the windows and leading edges will be bug-free.

There are some down sides to ownership, however. After writing one more check for insurance or for hangar rent, or for the repair of the number 2 comm, the thrill of ownership can pale a bit. For some, spending one more Saturday changing the oil, or washing the aircraft belly can make one wonder about the beauty of ownership (although a lot of my EAA friends take quite a bit of enjoyment in washing, polishing, and general maintenance.) But for all but the nerdiest of us, paperwork has to be toward the top of the list when it comes to the disadvantages of aircraft ownership.

Paperwork? Who said anything about paperwork? Let's back up a minute. Two questions that always come up on FAA exams are, "Who is

responsible for ensuring that the aircraft is in airworthy condition prior to flight?", and "What are the required inspections for an aircraft?" And a question that is more implied than asked, "How do we prove that the aircraft is in airworthy condition?"

FAR 91.7 states:

(a) No person may operate a civil aircraft unless it is in an airworthy condition.

(b) The pilot in command of a civil aircraft is responsible for determining whether that aircraft is in condition for safe flight. The pilot in command shall discontinue the flight when unairworthy mechanical, electrical, or structural conditions occur

And FAR 91.403 states:

(a) The owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an airworthy condition, including compliance with part 39 of this chapter.

The "inspections" questions are a bit tougher. We all remember that we need to have an annual inspection accomplished. And if the airplane is used commercially, we need to have the airframe, engine, and propeller inspected every 100 hours. But then we get a bit fuzzy. There is something in there about the VOR and the ELT. And wasn't there something about the altimeter and transponder?. Well, "yes" to all of the above. Here are the official answers to these vague thoughts.

From the FARs

Part 91.409:

(a) Except as provided in paragraph (c) of this section, no person may operate

an aircraft unless, within the preceding 12 calendar months, it has had—

(1) An annual inspection in accordance with part 43 of this chapter and has been approved for return to service by a person authorized by § 43.7 of this chapter

*(b) Except as provided in paragraph (c) of this section, no person may operate an aircraft carrying any person (other than a crewmember) **for hire**, and no person may give flight instruction **for hire** in an aircraft which that person provides, unless within the preceding 100 hours of time in service the aircraft has received an annual or 100-hour inspection and been approved for return to service*

Se that is pretty clear about annual and 100-hour inspections. What about those other inspections?

FAR 91.171 tells us that we must check the accuracy of the VOR at least every 30 days, but only if we are going to use the VOR for navigation in flight under Instrument Flight Rules. (If you only fly under Visual Flight Rules, or if you navigate under Instrument Flight Rules is by some other means, the regulations do not require you to check the accuracy of the VOR.)

FAR 91.207 tells us that the ELT battery must be replaced when there has been more than one hour of transmission or 50% of its useful life.

FAR 91.411 tells us that we need to inspect the pitot-static system (including its interface to the Mode C of the transponder) every 24 months.

So is that all? No. There is an entire additional group of inspections and activities that are required, but not spelled out. And that is that group of requirements established by Airworthiness Directive (AD).

When the FAA determines that a particular part or aircraft system needs a periodic inspection or replacement, it will publish an AD to that effect. These will vary widely by aircraft model, and by type of equipment installed. The AD may reference a particular starter or alternator or carburetor. It may apply to a wing spar, but only on aircraft with certain serial numbers. It can apply to the airframe, to the engine, or to the propeller. It may require replacement or refurbishment at a particular life point (hours or calendar months) or may require only an inspection. It is the rare aircraft that does not have several AD-mandated inspections.

So who is responsible for ensuring that these inspections are accomplished? If you are a pilot-renter, you might say, "The owner". If you are an owner-pilot, you might say, "My mechanic." And in both cases, you are partially correct. However, refer back to my earlier reference to FAR 91.7 and 91.403. The pilot is responsible for ensuring that the airplane is in an airworthy condition, and that all inspections are in compliance.

So we look at the engine and airframe log books, and we take them to our local mechanic and ask, "Am I legal?" All he can tell you is that the mechanic who signed off the most recent annual or 100-inspection stated that the airplane was airworthy on that date. He makes no statement of assurance that the plane is airworthy on the next day.

So here is the way out of this quandary. Sit down with your local mechanic and go through your airframe and engine logbooks together. Many aircraft inspectors (AIs) will state on the write-up for their annual inspection that "all ADs since last inspection are complied with." What you are really looking for is a bit more information. As each AD is complied with, the A&P who complied

with that AD should have stated what he did, and then stated the engine hours or date that the next inspection is due. (I have found that this is often overlooked.)

The result of this logbook inspection by you and your mechanic should be a written list of all recurring inspections or actions, together with the next due date or due tach time. (or due Hobbs time.) If

you are a renter, you should expect to see this list attached to whatever documentation you use to sign the aircraft out and back in. If you are an owner, you should have this listed posted in such a place that you are reminded to check for upcoming requirements.

Fly safe.

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