

How to Flunk an Annual Inspection

Under the FARs, an annual inspection is a pass-fail test. Sometimes failing is the best course of action.

OF THE NEARLY 200 RULES IN PART 91 of the Federal Aviation Regulations, far and away the most expensive for most aircraft owners is this one:

§91.409 Inspections. (a) 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 ...

This means that once a year, we have to turn our aircraft over to an eagle-eyed A&P/IA or FAA-certified repair station and pay them to perform an annual inspection. We then have to pay the shop or mechanic to repair all the airworthiness discrepancies that they find and to comply with all applicable airworthiness directives, airworthiness limitations, and other regulatory airworthiness requirements. The ultimate object of this costly exercise is to obtain a logbook entry containing the cherished magic words that permit us to fly the airplane for another 12 calendar months:

I certify that this aircraft has been inspected in accordance with an annual inspection and was determined to be in airworthy condition. /signed/ Eagle I. Inspector 123456789 A&P/IA

Although that's the way it usually works, there's actually another possibility: *flunking* the annual.

Under the FARs, an annual inspection is actually a pass/fail exam with two possible outcomes. The most common outcome is that the aircraft is found to meet all applicable airworthiness requirements, and we get a logbook entry containing the magic words mentioned above and approving the aircraft for return to service.

HOW TO FLUNK AN ANNUAL

However, the regs allow for another possibility: disapproval for return to service. In this case, we receive a logbook entry with a different set of magic words:

I certify that this aircraft has been inspected in accordance with an annual inspection and a list of discrepancies and unairworthy items dated mm/dd/yyyy has been provided for the aircraft owner or operator. /signed/ Eagle I. Inspector 123456789 A&P/IA

Along with such a logbook entry, the inspecting IA will provide us with a separate sheet of paper, signed and dated, listing the discrepancies and/or unairworthy items that the inspector feels must be corrected in order for the aircraft to be airworthy.

This alternative outcome is known as “signing off an annual with discrepancies.” While rare, it can be an extremely useful tool for dealing with unanticipated complications that sometimes arise during an annual inspection. Every aircraft owner should understand how this alternative works and when to consider using it.

Signing off an annual with discrepancies is almost always something that the owner must request. By making such a request, the owner is in essence telling the inspecting IA or repair station:

“Thanks for doing such a thorough job of inspecting my airplane. I've decided that I don't want you to repair one or more of the airworthiness

discrepancies you found during the inspection. I'm going to have those discrepancies addressed elsewhere. Therefore, please close up my airplane, give me a list of the uncorrected airworthiness discrepancies, invoice me for the work you've performed, and release my aircraft. We're done."

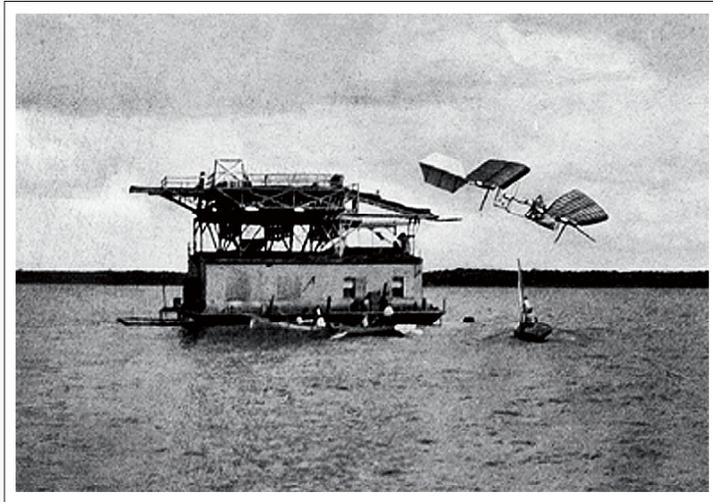
A sign-off with discrepancies completes the annual inspection. The aircraft does not have to be inspected again for another 12 calendar months. Naturally, the aircraft can't be flown until the listed discrepancies have been corrected. However, they can be corrected by any shop or mechanic that you wish to use, not necessarily the one that performed the annual inspection. The mechanic who corrects the discrepancies doesn't even need to be an IA. Once the discrepancies have been corrected (by whomever you chose to do the work), you can fly the aircraft. **You don't need to have the aircraft re-inspected until the next annual inspection comes due.**

WHEN TO FLUNK AN ANNUAL

Why on earth would you ever want to do this? There are a couple of good reasons you might.

One is that you have concluded the shop that performed the inspection isn't the best qualified shop to make the repairs. For example, perhaps the discrepancy requires extensive sheet metal work or composite repairs, and you and/or your mechanic conclude that it would be advisable to have the work done by a sheet metal or composite repair specialist rather than your regular shop. Same for an issue that you and/or your mechanic feel would be best addressed by an avionics shop. Or perhaps the inspection uncovered a propeller issue, and you'd prefer to fly the aircraft to the prop shop rather than have the propeller removed, shipped there and back, and reinstalled. Ditto for an engine issue if you'd prefer to take the plane to an engine shop. Or

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Figures 1 and 2 illustrate just such a situation. The owner of a Cessna 340 had an annual inspection performed by Cutter Aviation in Albuquerque, New Mexico. Cutter's inspection apparently uncovered a bunch of airworthiness discrepancies that the owner decided he'd prefer to have addressed by another shop, Mountain View Aeromotive in Alamosa, Colorado. Consequently, he directed Cutter to do only the minimum work required to put the airplane into ferryable condition (mainly complying with some recurrent ADs), then obtained a ferry permit, flew the airplane to Alamosa, and had Mountain View address all the airworthiness items on Cutter's discrepancy list.

Note that the Mountain View logbook entry (Figure 2) has an approval signature

that states "A&P" and not "IA." That's because the mechanic at Mountain View was performing repairs in his capacity as an A&P mechanic, not performing an inspection in his capacity as an IA. Cutter performed the inspection, and no further inspection was required by regulation for another 12 calendar months.

OWNER/IA DISAGREEMENTS

Another reason you might want to flunk an annual is when you find yourself disagreeing with your IA about how to deal with one or more discrepancies.

Suppose, for example, that your engine is 500 hours past TBO. It's running great, oil consumption is moderate, oil filter is clean, and compressions, oil analysis, and borescope results are good. You see no reason not to keep flying it until there's some good reason to tear it down. But your IA has a different view: He believes

strongly that the manufacturer's TBO should be respected. "I've gone along with your TBO-busting for the past two years, against my better judgment, but 500 hours over TBO exceeds my threshold of pain," the IA tells you. "I'm just not comfortable signing off this annual unless we overhaul or replace the engine."

Now, obviously it would have been better if you had this discussion with the IA *before* you hired him to perform the annual inspection on your airplane. But unfortunately that didn't happen. Your airplane is in pieces, midway through the annual inspection, and now the IA is telling you he's not willing to approve the aircraft for return to service without \$40,000 of engine work that you consider unnecessary and superfluous.

After some discussion, it becomes apparent that you and the IA are deadlocked. You're not about to spend the

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5-5-08 N2666J HOBBS 5531.3 WO# 8567

REPAIRED ITEMS FROM CUTTER ALBUQUERQUE WORK ORDER O1M-1789 DISCREPANCY LIST.

COMPLIED WITH AD 2000-01-16 INSPECTED EXHAUST PER PARA (b)(1) c (e). C/W AD 82-26-05 RUDDER BALANCE WEIGHT. INSPECTED WINGS PER TYPE A INSPECTION. INSPECTED FUEL SELECTOR VALVES PER SB MEB05-03. INSPECTED RUDDER STRUCTURE/TORQUE TUBE PER SID 27-20-03 AND 27-20-04. INSPECTED ELEVATOR TORQUE PER 27-30-00. INSPECTED MLG CRANK PIVOT BOLT PER SID 32-10-02. INSPECTED MLG GEAR COLLAR PER SID 32-10-04. INSPECTED MLG TORQUE TUBE PER SID 32-10-01. COMPLIED WITH MAIN AND NOSE GEAR RETRACTION TEAR DOWN PER SID 32-30-00. INSPECTED WING CARRY-THRU ATTACHMENT FITTINGS PER SID 57-10-14. REPLACED ELT BATTERY NEXT DUE AUGUST 2010. CHECKED ELT PER 91.2070. REPLACED LEFT AND RIGHT ENGINE FLAMMABLE HOSES. REPLACED MAGNETIC COMPASS WITH NEW UNIT. SWUNG COMPASS AND

FILLED OUT COMPASS CARD. INSPECTED AUTO-PILOT CABLE TENSION PER CESSNA SERVICE MANUAL. REPLACED TAIL BEACON BULB, REPL TRAILING EDGE SKIN REPAINTED AND CHECKED BALANCE SEE 337 DA STATIC WICKS ON RIGHT ELEVATOR AND RIGHT WING TIP TANK. REP FUEL FILLER CAPS. TIGHTENED ALL FUEL BLADDER CROSSOVER TUB BLADDER TANKS. CLEANED BOTH WING FUEL STRAINERS AND HEAT CHAFE STRIP ON RIGHT ENGINE INBOARD COWL FLAP. CLEANED BOT RE-SEALED LEFT TIP TANK FAIRING ATTACH NUT PLATES WITH PR 142 WING ROOT, AFT SIDE. AILERON LOWER PULLEY FASTENERS. REMOVE WING SPAR ATTACH FITTING BOLTS FOR PROPER THREAD ENGAGEMENT. SET CHERRY RIVETS ON INBOARD UPPER RIB HORIZONTAL STAB. INS ON TAIL UPPER FAIRINGS. REPLACED RUDDER STOP BOLT ANCHOR R STOPPS. REPLACED PILOT AND CO-PILOTS SEAT ROLLERS. ADJUSTED P ROLLER GUIDES. INSPECTED PILOT AND CO-PILOTS SEAT TRACKS, ANI LIMITS. INSTALLED FUEL BOOST PUMP PLACARD BY SELECTOR VALV DRILLED IN PILOTS SIDE, LEFT RUDDER PEDAL TORQUE TUBE. PATCH NACELLE INBOARD INTERCOOLER SCOOP. TIGHTENED LEFT MAIN GE REP/ ACFTD RIGHT MAIN GEAR TORQUE LINK PINS. PATCHED CRACK N LEFT REAR SKIN AND DRESSED NOSE GEAR LINKAGE BOLT ACCESS HO LEFT WHEEL BRAKE DISK AND BRAKE PADS.

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REG # N2666J
S/N 340A0718
HM 5530.4
TACH N/A

DATE 3/3/2009
W/O M-1789
AFTT 8154.7

1. C/W Annual inspection using Cessna 340A Maintenance Manual inspection check list as a guide. Aircraft found unairworthy at this time. A list of discrepancies and unairworthy items has been provided to the aircraft owner
2. C/W Cessna 400 hr/Annual Landing gear rigging inspection.
3. C/W annual inspection of cabin fire extinguisher for weight and security.
4. Made minor repair to crack in right wing upper skin just forward of aileron outboard hinge and replaced 2 sheared rivets on the outboard aileron hinge bracket going forward through the wing rear spar. Removed and reinstalled right aileron to facilitate the repair. Rigged aileron IAW Cessna 340A M.M. section 6.
5. Installed new bracket/bearing block assemblies for the elevator bellcrank. Left bracket assembly P/N 5312044-2 and Right P/N 5312044-3. Installed serviceable bellcrank P/N 5360801-4 and upper and lower stops P/N 5300400-5. Removed and reinstalled left aft fuselage skin P/N 5312000-11 to facilitate installation of the brackets and bellcrank for elevator. Rigged elevator IAW Cessna 340A M.M.
6. C/W AD2004-25-16R1 Kelly Aerospace, heater fuel shut-off solenoid by visual inspection as per paragraph (e) (1). No fuel leaks noted. Next due at AFTT 8254.7 or 3/3/2009 whichever is sooner. Amdt. #39-14076.
7. Checked AD2006-24-17 McCauley Propellers. Found N/A propellers have not been returned to service by Oxford Aviation or CSE Aviation. Amdt. 39-14836.
8. Checked AD2007-04-19 R1 Superior Airparts. Engine cylinders. Researched engine logbook and found no Superior Air Parts cylinders installed on the aircraft. Amdt.#39-15005.

I certify that this aircraft has been inspected and found safe for a one time Special Flight Permit dated 2/26/2008 from Albuquerque, N.M. (ABQ) to Alamosa, CO. (ALS)

Robert W. Friend

SIGNATURE:

Robert W. Friend

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Figure 2—The second shop repaired all the listed discrepancies and approved the aircraft for return to service.

Figure 1—This annual inspection was signed off with discrepancies, and a ferry permit was secured to fly the unairworthy aircraft to a different shop.



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airworthy. After discussing the estimate with the shop's director of maintenance and finding him to be completely intractable, we directed the shop to cease work, close up the aircraft, and document all the discrepancies it found (three pages worth, see Figure 3) on a massive 43.11 discrepancy list. We then took the aircraft to a different shop, which performed the necessary repairs for less than half what the original shop had quoted.

In the fourth case, the big repair station that inspected a client's Cirrus SR22 found the screws securing an autopilot servo motor to its bracket were loose, a common problem with these aircraft. We asked the shop to tighten the screws and apply some Loctite so they wouldn't loosen again. The shop's chief inspector said he could not tighten the screws without "approved data" and indicated the shop would have to replace the entire servo assembly at the cost of several thousand dollars. After trying to reason with this chief inspector without success, we had the shop sign off the annual with a discrepancy on the servo and had another A&P tighten the screws and clear the discrepancy.

FERRY PERMITS

If you flunk your annual and receive a disapproval for return to service, you're theoretically not allowed to fly the airplane until the listed discrepancies are corrected. But sometimes you want or need to move the aircraft to a different airport in order to have those repairs performed. Catch-22?

No problemo! That's why the FAA invented special flight permits (colloquially known as "ferry permits"). A special flight permit is simply special dispensation from the FAA to fly an admittedly unairworthy aircraft from one place to another on a one-time basis, usually in order to reposition it to where repairs are to be performed (or sometimes to evacuate it from impending danger). In most cases, getting a ferry permit is quick and painless.

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MIKE BUSCH

To get one, you simply need to fill out FAA Form 8130-6 (see www.SportAviation.org for a link to the form). You only need to complete blocks I, II, and VII of the form. See Figure 4 for an example.

You'll also need a logbook entry from any A&P mechanic certifying that the aircraft is in adequate condition to make the one-time ferry flight safely. The one at the bottom of Figure 1 is a good example of such a logbook entry.

Your decision to flunk your annual solves his problem as well as yours, so in all likelihood the IA will be happy to help you obtain your ferry permit and get out of Dodge.

Even if the reason you're requesting the ferry permit is because you're deadlocked with an IA over some disputed airworthiness discrepancy, in my experience the IA will be more than happy to provide you with the necessary safe-to-ferry logbook entry. Remember that the IA is just as anxious to get rid of you and your airplane (and get paid for his work) as you are to get your aircraft out of his shop and moved to another shop. Your decision to flunk your annual solves his problem as well as yours, so in all likelihood the IA will be happy to help you obtain your ferry permit and get out of Dodge.

Simply fax your completed Form 8130-6 plus a copy of the A&P's logbook entry to the local FSDO, and then follow up with a telephone call to the airworthiness inspector on duty at the time. In most cases, the FSDO will fax you back your special flight permit the same day. See Figure 5 for an example. Be sure to carry the permit in the airplane when you make the ferry flight. That's all there is to it. **EAA**

Mike Busch, EAA 740170, was the 2008 National Aviation Maintenance Technician of the Year and has been a pilot for 44 years, logging more than 7,000 hours. He's a CFI and A&P/IA. E-mail him at mike.busch@savvyaviator.com. Mike also hosts free monthly online presentations as part of EAA's webinar series on the first Wednesday of each month. For a schedule visit www.EAA.org/webinars.

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Dear Pacific Health,
I would like to take the time to thank you for your Optimis-7 eye drops. They have helped me tremendously. I have been taking Claroxan – the tablets for natural vision improvement – for a good while and finally decided to order the drops.

I am a cargo pilot for a small firm based in Albuquerque. I fly a Beechcraft Baron 58 on a usual route around the Southwest four days a week, typically flying around time-critical AOG parts, blood, samples and other things that need to be moved when normal means aren't good enough. I usually show up to the airport around 3 PM for a 4 PM departure. I take a lot of enjoyment knowing that my company and my service provide someone with something they need.

In the desert climate that the Southwest is, it is very dry and dusty. Also, the Sun is incredibly intense. I try to wear sunglasses, but sometimes I forget them and you just have to make do. I have noticed that my eyes are a bit irritated and my vision is not as good as it could be in the day in, day out druthers of work life.

The last time I placed an order for Claroxan I was casually talking with the representative about the dusty, dry conditions that I face day to day.

He mentioned that it might help for me to incorporate Optimis-7 eye drops in with my daily regimen of Claroxan. I decided to give it a try and have been very happy with them. Since taking the Optimis-7 eye drops my eyes have felt fresher than ever before.

After applying a few drops, I feel instant relief to any dryness or scratchiness. In addition to removing dust and small foreign particles from the lens of my eyes, they seem to be cutting down on the glare I used to see in the cockpit. Also, I was reading that the ingredients in Optimis-7 might help block the UV blue light that I encounter at cruising altitude in clear sunny skies.

Thanks for the help,
Matt F. – ABQ

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