

Paper Primer Paper Primer Paper Primer

There's no one way to get your plane registered and certified, and each inspector may do things a bit differently. I talked with Joe Gauthier of Cromwell, Connecticut, to get his perspective. Gauthier's credits include EAA Flight Advisor and Tech Counselor and, most significantly, FAA Amateur-Built Designated Airworthiness Representative (ABDAR). In other words, he is a volunteer who can do all of that FAA-mandated paperwork. (ABDARs can and should be reimbursed for expenses, but the actual inspection is free.)

Here's how Gauthier likes to work, with some comments along the way if you're working with somebody else. Joe Norris of EAA, another ABDAR, also provided information.

1. Before you start, check on insurance. Not all homebuilts, not all pilots, and not all combinations are insurable.
2. From day one, keep a log to prove that you built the plane. Include pictures of you working on the plane. The legal purpose is to document the claim that you actually did the work and your airplane qualifies as Experimental Amateur-Built.
3. Get the paperwork packet from your local MIDO (preferably) or FSDO. This packet will have all the forms you need to register and certify your aircraft. You can locate your nearest MIDO at www.faa.gov/certification/aircraft/map.htm, or FSDO at www.faa.gov/avr/afs/fsdo/index.cfm.
4. Reserve an N number. You can do this pretty much any time, but the sooner the better.
5. Register your airplane, and allow at least 90 days for the paperwork to be processed. The first of these forms is only available from the MIDO or FSDO (in that packet), or maybe from some of the larger aircraft sales organizations, but the others are also available on line:
 - AC Form 8050-1 Aircraft Registration Application
 - AC Form 8050-2 Aircraft Bill of Sale (kitbuilt aircraft only)
 - AC Form 8050-88 Affidavit of Ownership for Amateur-Built Aircraft
6. As you are completing the airplane, schedule the inspection. If you already have a working relationship with an ABDAR, a few days may suffice. If you are using a regular DAR or an FAA inspector, the lead time will likely be much greater. Give him a call months in advance to determine his lead time and how he likes to operate.
7. Finish the airplane, then use a formal preflight inspection checklist. A good one that should be available soon is part of the EAA's XP-3 program, which recognizes best practices in homebuilt construction, inspection, and flight test. For example, the most common mechanical problems on first flights relate to the fuel system.

8. Have all your friends, your local mechanic, and everybody else who happens by inspect your work. Bribe them with snacks and drinks. Have mirrors and flashlights available for them. They may find something significant.
9. You, the builder/applicant, have to take responsibility for the airworthiness of the aircraft and make a logbook entry stating that the aircraft has been inspected and found airworthy. Don't depend on the FAA/DAR inspector to completely clear your aircraft of any defects.
10. Calculate the weight and balance of the airplane for various loadings including the one you anticipate for first flight.
11. Get your flight test program together, and get your first flight planned. Your local EAA Flight Advisor can help you, as can the company that built your kit and other builders. A thorough, logical flight-test program has been shown to reduce first flight accidents by more than 90%. The full flight test program should help you find problems during flight test and not on your first trip with family on board.
12. Don't engrave your data plate until you have the Final Registration Form 8050-3 back from the FAA because the builder name and model information (on all the forms) have to exactly match the data plate. Gauthier reports that mismatches are the most common problem he finds, and there's no way around it.
13. Have the plane inspected—finally! Some inspectors, like ABDARs, may go over the plane with a fine-tooth comb. Some others may just do the paperwork. Gauthier relates, "Because of the variation in inspectors' experience levels, not every one of them does it the same way. The ABDAR program has as one of its goals the intent to improve the level of standardization and thereby make the inspection process more predictable. This is particularly true in the application of Operating Limitations issued to homebuilders. Don't be surprised if you are asked to do something different than what you are reading here. Sometimes that has serious consequences and other times it does not. You need to know what should happen to know the difference."

—Ed Wischmeyer



Plug & Play Experimental Instrument Panels

AEROTRONICS

406-259-5006

1651 AVIATION PLACE, BILLINGS LOGAN INTERNATIONAL AIRPORT, BILLINGS, MT 59105

Choose the Industry Leader. www.aerotrionics.com

