General Aviation

Joint Steering Committee

Safety Enhancement Topic



Maintenance Placards

The General Aviation Joint Steering Committee (GAJSC) has identified a number of fatal general aviation accidents that were caused by attempting flight in aircraft that were undergoing maintenance and not yet returned to service. This safety enhancement suggests adopting lock out/tag out methodology to ensure pilots are aware of un-airworthy aircraft conditions.

Out of Order

Everyone knows that sinking feeling you get when you arrive at a public bathroom only to see that all-too-familiar yellow sign stating — "Restroom Closed for Cleaning." It's usually followed by some under-your-breath muttering, teeth gnashing, and a feverish search for an alternate solution.

In the aviation world, however, arriving at a plane that is "out of service" may not have as obvious a warning sign as a locked out restroom. It doesn't happen often, but some GA accidents have resulted from pilots inadvertently flying aircraft that were not yet returned to service after maintenance. The GAJSC feels that an "out of service" placard or sticker conspicuously placed in the cockpit can go a long way toward preventing such accidents. This placard would only be removed once all the aircraft's return to service documentation has been completed.

Who's in Charge?

As pilot in command, you are ultimately responsible

for the airworthiness of the aircraft you fly. Title 14 Code of Federal Regulations (14 CFR) section 91.3 states: "the pilot in command is directly responsible for and the final authority as to the operation of that aircraft." Section 91.103 further states that, "the pilot in command shall become familiar with all available information concerning that flight," and that of course includes airworthiness. But how available is that airworthiness information?

Most aircraft owners are up to speed on the status of their machines, and rental fleets usually have aircraft status boards or squawk sheets that you can review as part of your preflight. But occasionally there's a nasty surprise for pilots who take flight — or try to — in aircraft that aren't ready to be returned to service. To avoid this, make it a point to coordinate with your mechanic before, during, and after maintenance procedures. Ask questions about any procedures you



Continued on Next Page



may not be familiar with so that you have the full scope of what type of work is being done. Be sure to also discuss any placarding plans you want to implement. Owners and operators are free to make their own placards to post in the cockpit of aircraft scheduled for maintenance. Just be sure you check that all maintenance has been performed and documented *before* you remove the placard.

Preflight Perfection

Another good way to verify your bird is in proper flying order after maintenance is to perform an *enhanced* preflight. You may come across a socket wrench that was left behind during your check, but more importantly, you may spot hoses or electrical connections that have not been reestablished or properly connected after work was done.

When preflighting, you should always begin with reviewing aircraft documentation. Make sure the maintenance work has been documented in the appropriate aircraft logbook and check that the aircraft has been returned to service. Ensure that the tachometer and/or Hobbs meter readings are correct. If the aircraft was test flown, there may be a discrepancy between the logbook time and what you see on the panel. Also make sure that all the required inspections have been performed and are documented.







Slow and Steady Wins

Take your time while looking over the aircraft during preflight. Use a checklist so that you don't skip anything. Pay particular attention to any areas that were worked on including any disconnections that may have been required to access the parts that were serviced. If work was done on the flight controls, ensure they move freely *and* correctly. And while you're at it, make sure the aircraft has been serviced with the proper type and grade of fuel and oil.

Finally, after any maintenance, pilots should consider taxiing out to do a run-up check, then return to your starting point. Shut down the engine, get out, and carefully look over everything. This may be your last chance to catch something that wasn't quite right, quite tight, or quite ready for flight. Special attention should be paid to things like oil leaks, loose fasteners, and so on. Then, if everything is OK, perhaps it is time to fly. As a reminder, for the first flight, stay in the pattern, within gliding distance of your runway.

Resources

- FAA Safety Briefing, Mar/Apr 2012 "Advanced Preflight"
 https://go.usa.gov/xnKMn
- FAA Safety Briefing, Mar/Apr 2011 "Going Beyond Preflight" https://go.usa.gov/xnKe8
- FAA Safety Briefing, May/June 2009 —
 "Airworthy or Not?"
 https://go.usa.gov/xnKMv