

## BUILD IT BETTER THAN REQUIRED



Many of the amateur built accidents are the result of safety issues that have been addressed by the certification regulations years ago. Just because the Amateur Built aircraft doesn't have to meet these standards doesn't mean it can't. There have been fuel system failures due to the use of automotive fuel strainers, for example. Some newer, high tech ignition systems have been improperly installed. Yes, you may be legal as far as the FAA is concerned. How about the Laws of Physics and Probabilities? *If it happened before, it can happen again.*

## NEED INFORMATION?

*There is a wealth of information available from numerous sources such as designers, type clubs, EAA, and the FAA to name a few.*

*The FAA Team has free courses available on [FAASafety.gov](http://FAASafety.gov), both for pilot operations and for maintenance.*

*FAA.gov has links to Advisory Circulars, Flying Manuals, Special Airworthiness Information Bulletins, Regulations, and much, much more.*

**FAASafety.gov**  
**FAA.gov**  
**EAA.org**

**Are you aware that participants in the Wings and AMT Awards Programs tend to have fewer accidents, incidents, and violations?**

OK-11-1324-JAH



Federal Aviation Administration

# Amateur Built Aircraft Accident Rates

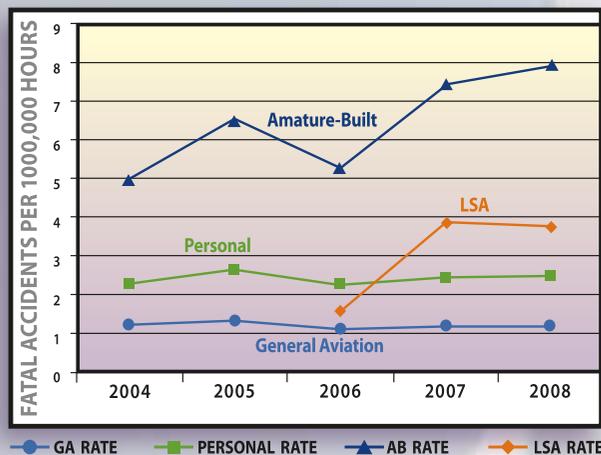


**FAASafety.gov**  
**FAA.gov**  
**EAA.org**

OK-11-1324-JAH

# AMATEUR BUILT ACCIDENTS

## SP-LSA FATAL ACCIDENT RATES



**W**e are having a problem with Amateur Built aircraft. In 2008 Amateur Built aircraft fatal accidents approached nearly eight accidents per 100,000 flight hours, compared to just over one accident per 100,000 flight hours for “mainstream” GA aircraft.

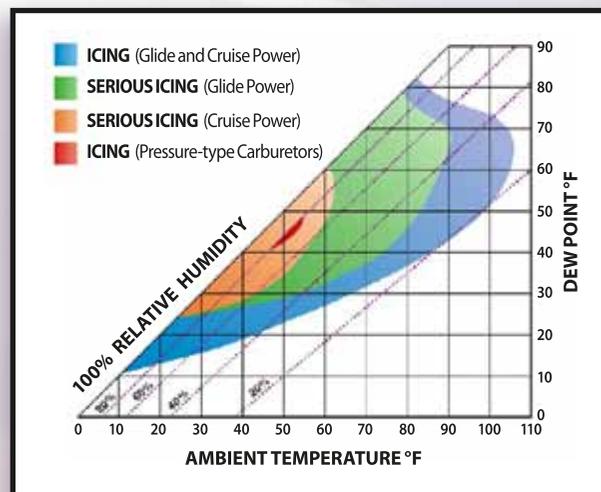
Preliminary 2010 data shows an accident in an Amateur Built aircraft is twice as likely to be fatal as in a factory built aircraft! The high accident rate trend is climbing!

One of the largest problem areas we are having is with general

maintenance issues, and engine reliability in particular. Keep in mind that the factory built aircraft start with engines that meet stringent certification standards, and are maintained to that level by regulatory requirements. Most manufacturers of experimental engines have manuals with specific recommendations. *AC 43.13-1B is a wealth of general information.*

Many engine failures are unexplained, but a review of the conditions at the time of the occurrence show most of those fit in the carb ice susceptibility chart below.

Please refer to SAIB CE-09-35 for more information. (available for free download at [www.faa.gov](http://www.faa.gov))



Another problem area is shared with the rest of GA: Approach and Landing accidents. Get some dual instruction and get sharp on crosswinds.

While you are at it, why not review emergency procedures in case we missed something from maintenance.

Fly a stabilized approach. Use your checklist!

Many accidents occur in the first few hours of ownership. Often these are buyers having accidents, after purchasing from the builder. Not all amateur built aircraft fly like the aircraft with which you are familiar. Also, some systems may be less than totally reliable.

Get a thorough checkout. Get to know the aircraft inside and out. This applies to the ATP moving into a Light Sport as much as the other way around.

