

A Timeless 182



By Dennis Wolter

With all the doom-and-gloom talk going on about corrosion, I thought we should take a break and take a look at the brighter side. Not all older Cessnas are in the same unfortunate shape as some I've been using recently to illustrate corrosion issues facing our fleet of airplanes. To put this into perspective, it is my opinion that the majority of older Cessnas are actually healthy, corrosion-wise, and with proper care can remain that way indefinitely. I'm basing this statement on the average level of corrosion we find in the majority of airframes we inspect at Air Mod. And, believe it or not, about once a year we open up an airplane that, from a corrosion standpoint, is like new.

In 2012, we renovated two airplanes that were an unexpected surprise, and both were among the oldest airplanes we've done, one being a 1957 H35 Bonanza and the other a 1961 182 (the subject airplane of this article). These two airplanes were truly almost corrosion free. Neither airplane lived in a high humidity, pollution prone area, and both are kept in hangars, flown regularly and have

been cared for by attentive owners. All of that counts, but good maintenance is really the key to preservation. When I saw how clean the cabin area was in the 182, I opened up the airframe to look into the usual suspect areas. The whole airframe was spotless. It seemed the more I looked, the better it got – wow!



Super-clean forward spar attach fitting – typical of this entire airframe



Newly painted, original color and design

As it turned out, not everything was great. The owners, Vicki and Dan Eifert, initially did not want us to install a new headliner when we did the new interior. During an earlier avionics installation, the existing 40+ year old headliner had to be partially removed to facilitate the installation of new antennas on the cabin top. As is often the case, the old delicate headliner didn't survive the event, so the radio shop involved had a local interior shop install a beautiful new headliner.

As we were in the process of removing some interior trim components, our lead tear-down technician Jeremy noticed some corrosion where the edge of that new headliner was tucked up

under the aluminum retainers along the edge of the cabin windows. Having seen this situation before, I asked Jeremy to pull the headliner loose above the pilot's door jamb. As he pulled the headliner material out of the retainer strip, copious amounts of aluminum oxide dust came with it. After getting approval from Dan, we removed the entire headliner. We found fast-growing corrosion anywhere the headliner vinyl backing touched the shiny, bright aluminum. Unfortunately, I have seen this situation many times in the past. The culprit here is a strong corrosive bromide flameproofing solution that was sprayed on the cloth backing of the vinyl in order to get it to pass the FAA's flame proofing specification, FAR 25.853. All too often, unknowing material suppliers or interior technicians will spray un-flameproofed vinyl, leather or carpet with this after market chemistry – a very bad idea. The level of corrosion shown in the photographs took about 18 months to develop; luckily we caught it in time. With the replacement of retainer rails, a thorough cleaning and chromating, and a new headliner, the situation has been completely corrected.



Severely corroded headliner retainer strip



Corrosion on the surface of the aft spar carry-thru where the contaminated headliner touched it

Here's a test you can perform if you want to check the integrity of any interior materials that have been or are about to be installed in your airplane. Touch your tongue to the back side of the material. If you can taste any bitterness or saltiness I would recommend removing the installed material or discarding any materials not yet installed. Better still, buy only materials that were manufactured for aircraft use and that come with proper documentation. Still give it the taste test. We occasionally get something that was incorrectly treated, although it came with correct certification.

Back to why I think N9069X is a very special 182. I personally believe that the Cessna 182 is just about the best light airplane out there, considering the flying skills of the average private pilot, the aircraft's performance, load carrying ability, range, handling qualities, build quality, durability, maintainability and structural integrity. Of all the 182 models built, I believe that the last 182s built without a rear window are the most efficient and certainly the best looking of the bunch. I know many of you have heard me speak highly of my 1973 172 with its 180-horse engine and extra fuel tanks, but I'm talking stock airplanes here, so it's my thinking that the 1961 182 is the plane of choice in this discussion.

One can't talk about a special airplane like this without including its owners. I first met Dan and Vicki Eifert at one of the many air shows I attend. Dan approached me with many of the usual questions that so many owners have. I soon realized that Vicki's and Dan's relationship with their 182 is very much like mine with my 172. Actually, back in 1996 when they purchased 69X, they initially thought they would upgrade to a newer 182 as they approached their retirement years. However, a few summer trips from Ohio to Alaska and a long list of distant destinations all over the US convinced them that the airplane was a keeper. Their 'fly before you renovate' plan falls right in line with my theory of how you should approach aircraft renovation. I am thoroughly convinced that if you immediately drop off a newly purchased older airplane at a shop for a complete redo, you will find later that you'll want to change several of the things you had the shop do once you've actually used the airplane for a year or so. The Eiferts

did their research and put a plan together, one that insured a good outcome as they thoughtfully began to work their way through the complexities of a complete quality renovation of an older airplane.

So the process began with an engine and prop overhaul in 1997, an S-TEC 30 autopilot in 2001, a Garmin 530 WAAS GPS and a new very tidy metal instrument panel mod was installed in 2007, Monarch fiberglass tanks came in 2008, original-design new paint job was applied in 2010 and then in 2011 a 406 mhz ELT and LED position lights were installed, along with a thorough re-rigging (I think a comprehensive re-rigging to factory specs is something most older Cessnas need). Then in 2012 Dan and Vicki came to us for the new interior, which included field-approved installation of later seats, new McFarlane seat rails, upgraded ventilation system, BAS shoulder harnesses (without question a safety upgrade that I highly recommend), Cessna secondary seat stop system for the pilot's seat, and Mountain View Aviation door stewards.



A great avionics package and well built all-metal instrument panel with new switches and circuit breakers

Due to Dan's and Vicki's passion for the outback type of flying, we did their entire interior in durable vinyl and wool carpet. With new door and window seals and our extra efficient sound proofing, they are very pleased with the quiet and comfortable cabin environment they now enjoy. The photos speak for themselves; well, actually they

don't show the very high level of craftsmanship and detail that everyone involved has invested in this airplane. OK, I'm blowing my own horn, but I can't help it when it's so rewarding to be part of creating such a great airplane like N9069X, especially for such a great flying couple. Oh, did I mention that Dan is a 29-year air traffic controller? Do you think he likes airplanes?

Until next time, fly safe!



Very functional, maintainable ergonomic interior with newer-style articulating seats



Two very proud airplane owners

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