

Putting your “baby to bed” on a cold winter night

by Bruce Hinds

As much as seaplane pilots love the water, we try everything we can do to keep the water on the outside. When we apply that statement to winter operations it becomes even more relevant during the cold and damp months when we fly so much less. Yes, water is wonderful, but it eats up your airplane.

Brushing off the cobwebs from my early training days I kind of remember the guy that owned the flight school telling me to open the oil filler cap after landing to let the moisture out, I think I remember that. I've been lucky to participate in my annuals since I've purchased the Bee and my IA made the point about doing just that. I should probably do that more since it is a Lycoming and the cam is high in the engine making it more susceptible to the moisture burned out of the oil and cold air in the engine. It requires a ladder and opening the cowl, so I don't do it as often as I should. My IA has a really neat airplane he never flies. It's been a work in progress for many years and one day when I saw it I noticed these red shop rags hanging out of the exhaust.



Notice cut line is slightly above can taper

I'd flown for many years before becoming an aircraft owner. The ravages of rust and corrosion hadn't been much of a concern until I was going to be paying the maintenance bills. Flying turbines for a corporate company they always put their airplanes to bed with intake and exhaust covers. Pretty airplanes with pretty covers but I never gave much thought to piston planes. Sure the racing war birds that have short pipes need to keep the rain out, but most aircraft just don't have them and I hadn't given it a thought until I saw those red rags.

If you think about the way the engine works, there is only one cylinder with both valves closed at one time. The prop usually stops on a compression stroke. All the other cylinders have at least one open valve. That means, as the engine cools and the air contracts, it draws moist outside air into the pipe and into the cylinder through the exhaust. Most airplanes use a filter on the intake that is coated with an oily goo, but the exhaust is open. My IA coated the red rags with Aerokroil or WD-40. That will absorb the moisture in the pipe and help to keep it out.



Aerokroil soaked foam inside can

I don't know about you, but carrying around oily rags to stuff in the pipes doesn't sound like something I want to do, yet we were going off camping and spending the night in locations other than our hangar. I found a nice solution to the problem as I popped the top off a soda pop can. The taper at the top of the can, depending on how it's cut, allows for anything from a 2" to 2½" inside diameter, perfect for most size GA exhaust pipes.

I cut the top off the can with a cutting wheel on a Dremel tool, then folded back the cut edge with a pair of 90° needle nose pliers back into the can, not quite all the way. Then as I slid it over the end of the pipe it pushed the folded ends into the can and formed a nice snug fit. It may sound like fingernails on the blackboard, but not to worry! The aluminum can is much softer than the stainless steel pipe so you'll never hurt the pipe. The cans in this picture have seen years of use, when I repaint them I may even dip the cut ends in some PlastiKote, the stuff you can buy at Lowes or Home Depot for coating the handles on tools. That makes a nice airtight fit.

I then cut some pieces of old foam rubber we had laying around and stuffed those into the can and sprayed them with a healthy dose of Aerokroil. The standard size cans are even long enough for scalloped cut pipes.



Can installed over exhaust pipe. Orange paint helps removal.

Now when I put our “baby” to bed for the night I can reach under the back seat and pull out my “cans” and cover the exhaust. The nicest part is that they remain nice and clean. Any crud stays on the inside of the can. Painting them orange helps me to remember they’re there. Nice thing about these is if you forget and crank up with them on they just blow off. If you don’t find them, they are easy to replace.

Who doesn’t have some aluminum cans around the hangar?