

“I Don’t Think That This Airplane is Supposed to be Leaving a Vapor Trail”

By Gene Benson

A few puffy cumulus clouds were balancing atop their rising columns of relatively warm air in an otherwise crisp blue sky. The warm sun shining through the cool air of mid May in Western New York State made for an exceptionally pleasant day. Just a little while earlier, I had removed the cowl plugs, the pitot cover, opened the cowl flaps that I always keep closed when parked on a ramp during nesting season, and proceeded to run the “exterior inspection checklist.” The songs of several different species of birds had provided a serenade during the preflight inspection of my Beechcraft Duchess as it sat on the ramp of a small, non-towered airport. Strapped securely in the “best seat in the house”, the left front seat, I commented to my wife in the right seat about the beautiful day. She agreed and added that this was a definite advantage of retirement: the ability to go flying in the middle of a nice afternoon.



The old English proverb, “All good things must come to an end” was about to prove valid. As I looked out the left side window to check traffic, I observed a trace of white smoke coming from under the left wing. “I don’t think that this airplane is supposed to be leaving a vapor trail,” my brain told me. The universal element for putting fear in the heart of a pilot is fire. It appeared that after five decades and more than fifteen thousand flight hours, I was experiencing my first fire in an airplane.

My autonomic nervous system was activated just as it was designed to do. A rush of adrenalin shot through my circulatory system and to my brain. My heightened sense of awareness assisted me in evaluating the situation and the degree of danger.

Maybe all good things must come to an end, but the end is not always a disaster. We were still on the ground! We had just completed the “before takeoff checklist” and were about to taxi onto the active runway for departure. My traffic check out the left window was to make sure there were no airplanes speeding down final.

Very many years ago, my instructor told me, “It is always better to be on the ground wishing you were flying than to be flying wishing you were on the ground.” Those words of wisdom were never truer than they were in this situation.

But just because the airplane was still in firm contact with the Earth did not mean that the situation was not serious. I did not know the location of the fire, nor how extensive it might be. Was there an oil leak? Was there a fuel leak? Some sort of combustible material was fueling whatever was burning and it was only inches away from the left fuel tank that contained about forty gallons of avgas. I instinctively shut off the fuel to both engines while instructing my wife to evacuate the airplane and call the fire department. I secured the mags and master and evacuated as well. As I reached the pavement, I could smell a very unpleasant, acrid odor. It was not a smell with which I was familiar.

Arriving at the rear of the left nacelle, I could see something smoldering just inside the cowl flap. It appeared to be pile of straw. It did not take long to realize that it was the ruins of an upper middle-class home for a family of robins. Since no flame was visible at this time, I elected not to use the fire extinguisher. I grabbed the tow bar out of the baggage compartment and used its hook shape to drag the remains of the nest out through the cowl flap. To make sure the fire was in fact extinguished, I began the task of releasing the multitude of fasteners that secured the upper cowl in place. Once the fasteners were released, I lifted the large aluminum assembly clear of the engine and propeller. Straddling the exhaust pipe on the outboard side of the engine compartment was more nest material, and sadly, four blue eggs. Only a small portion of the nest had ignited, but it was enough to burn a small hole in the fiberglass portion of the lower cowl, burn through two hoses, and damage one of the engine shock mounts.

Just as I was completing my assessment of the situation, the Deputy Fire Chief for local volunteer fire department arrived with lights and siren. In a very professional manner, he surveyed the situation, determined that there was no danger of additional fire. He then asked me if I was comfortable with that determination. When I said that I agreed, he used his portable radio to cancel the remainder of the fire assignment that was on the way. We seldom recognize the contributions that so many individuals make everyday by serving in the volunteer fire departments of their communities, giving of their time and talents as they, without compensation, protect the lives and property of us all.

So, what is the point of all this? After all, it was just a smoldering bird's nest that caused only minor damage to an airplane that was not even in flight. Nobody got hurt and a little excitement keeps the blood flowing.

What if I had not noticed the smoke and had executed the takeoff? I will never know the answer to that question. Would the increased airflow have blown the fire and the nest out through the cowl flap? Or would the rush of air have fanned the fire to the point of igniting the whole nest? With the nest ablaze, would the fuel lines be at risk? Would I have noticed the fire shortly after becoming airborne and elected to make a precautionary landing straight ahead, possibly running off the end of the runway? Would I have noticed the fire soon after the gear was up and elected to shut down the left engine and come back for a landing on one engine, possibly with the left cowl ablaze? I will never know.

After the whole thing was over, and the upper cowl was reinstalled, I drove my wife home and we had a quiet dinner. I was pleased that she had handled the whole thing in a

calm, composed manner. Then, the nagging started. Not from my wife, but from the little safety mentor inside my head. What had I done wrong that resulted in putting my wife and myself in that dangerous situation? I drove back to the airport and studied the location of the nest and my field of vision inside the cowling, looking up the cowl flap. It was clear that I had not merely missed observing the nest during the preflight inspection; it simply was not visible with the cowl in place. I believed that I had taken every precaution to keep birds out of the airplane. I have been flying long enough to notice bird droppings on the airplane upper surfaces and take them to be indicators of unwanted tenants. Since the squatters in my airplane had entered from underneath, there was no such evidence.

Having satisfied myself that on a normal preflight inspection, I could not have reasonably expected to notice the nest, I called a long-time friend who I consider to be the ultimate expert in airworthiness safety. He was, at the time, an airworthiness inspector at the Portland, Maine FSDO, and manager of the Aviation Safety Program there. After a discussion, we mutually determined that the only way to avoid such an occurrence in the future is to remove and replace the upper cowlings as a part of the preflight inspection. That is not a fun thing to do, and it will add about twenty minutes to the prep time for every flight. But, by removing the cowls, I can also check the condition of hoses, wires, and components that I could otherwise not see. Once nesting season is over, I probably will not remove and replace the cowls before every flight, but I will vow to do it on at least every third flight, or every two weeks, whichever occurs first.

I am thankful for the happy ending. The insurance company paid for the damage and the airplane was flying in a couple of weeks, with a slightly more experienced pilot at the controls.