

Ice Can Be Very Scary!!

I made it, but, trust me, never again if I can avoid it!

By: John Dohm

As I sat there reading the latest issue of *The Twin Cessna Flyer*, I was particularly drawn to the article on ice. Therefore, I decided to provide you with this true and very scary story.

Several years back I called and became a member of the club as I had just graduated from a Cherokee Six to a 1981 310R, the most beautiful aircraft I have ever owned. You were kind enough to match my membership number with the serial number of the 310R (2108). You and Phil Yoder helped me clean a clogged fuel injector when we flew into the Dominican Republic. Thank you.

After completing SimCom training, multiple hours of dual instruction, Recurrent Training and hundreds of hours of flying over several years in all kinds of conditions, the greatest test of my piloting skills presented itself on a flight in northern Wisconsin. A short one-hour flight, two days before New Years, where my weather briefing indicated I would be on top all the way to my destination.

Tops were forecasted to be 7,000 with a ceiling of 800 at my destination. My destination had a localizer and the MDA is 354 AGL. The briefing also called for a chance of light rime ice in the clouds, but since the plane was certified for known ice, I was willing to take the chance. (All Pireps were negative for ice.)

Tops were indeed about 7,000 and as I flew along at 8,000 in the clear, I decided I would use my IFR approach approved Garmin GPS as my primary navigation instrument with the localizer as a backup. The GPS was relatively new and I was still getting used to its operation, but because the current weather as I approached was still saying 800 overcast, I felt I had plenty of room to use the GPS as long as I kept one eye on the localizer as a backup.

As I climbed out, there was no further accumulation of ice until I was again established

As I began my descent into the clouds, I began to pick up a trace of rime ice. As I continued on the approach, there was a more rapid build up of ice that accumulated beyond the de-ice boots. I understand that this is called LRD (Large Rain Droplet) ice. While I was able to eliminate a good amount of ice with the boots, all of the flight surfaces continued to carry some.

When I crossed the outer marker, I began to notice a conflict between the GPS and the localizer. While the GPS said I was centered on course, the localizer said I was starting to drift left of center. Mmmmmmm. Decision time? Believing that I had 800 feet of clear below me, I stuck with the GPS.

I wondered if there was something wrong with my altimeter as I passed through 8, then 7, and then 6 hundred feet above the ground without breaking out. I watched the spread between the GPS and localizer get wider, and the ice that wasn't supposed to be there get heavier.

When I finally broke out 400 feet above the ground, I learned that my altimeter was right and that the localizer was correct. With the GPS now blinking the "inaccurate info" message, I could see I was a quarter of a mile from the field and a quarter of a mile left of center. Decision time! Bank hard right with ice on the wings or go missed approach back up into the ice. I kept the wings level and went missed back into the clouds. Maybe this was wrong, but on a sad note, as this was all happening to me, I found out later that 30 miles east of me, a Citation with two 10,000 hour pilots were faced with the same problem. Being left of course and carrying a load of ice, they made the decision to bank right for the runway. When they did, one wing stalled and the aircraft spun into the ground.

on another approach. Making another approach was a difficult decision, but I felt I could depend

on the localizer, I now knew what the ceiling was, the aircraft was handling fine, and it was all down hill from here. So, I tried it again.

I made a rapid descent, built up some more ice and leveled off just outside the outer marker. My throttles were full forward and the speed continued to bleed off to 118 knots indicated and the 310 began to buffet a quarter mile outside the middle marker. I now knew that I had to “nail” this approach. Another missed approach and go-around was now out of the question!

I nosed down a little and was approaching 122 knots without the buffet. I stayed centered on the localizer, maintained my speed and broke out at 400 feet with the runway right in front of me.

While my decisions had gotten me safely to this point, there are many that would argue with some of them. Trust me my friends, it’s easy to read this in the comfort of your easy chair and second guess what I was going through. However, my next decision was indeed, absolutely wrong! After having passed the threshold with so much speed, and still being several feet above the runway, I nosed up ever so slightly and immediately fell out of the sky! No buffet, no stall warning, no anything but **WHAM!**

It is said that any landing you can walk away from is a good one. We all thankfully walked away from this landing but we had a badly damaged aircraft. The carry-through spars, some wing ribs, part of the landing gear and skins were all damaged.

I learned several lessons from this experience, but the most important one is to **NEVER** mess around with ice. Even if the aircraft is certified for flight into known icing conditions, it can jump out and bite you.

After talking with my insurance adjusters, several salvage operators, the FAA and the NTSB, they all agreed that the 310 does not like to carry ice. I heard many stories about other pilots whose airplanes were either being fixed or parted out because of hard landing damage

caused by ice. If the ice is the wrong amount in the wrong places, that sweetheart of an airplane will fall out of the sky without warning.

Regardless, for those of us that want to carry a lot of weight, with a lot of speed, with a lot of comfort and safety, at a comparatively low price, I still believe the 310 is one of the best all-round airplanes. I bought another one and fly it all of the time. My new one is also known ice, but with my new-found respect for mother nature, I try to avoid it.

Thanks to you, Larry, and *The Twin Cessna Flyer*, for being so reliably present, month after month, reminding us how lucky we are to have friends and a place to learn more about our aircraft and share our passion for flying in *The Twin Cessna Flyer*.