



# One Large Adrenaline Cocktail

What happens when the fuselage gas tank splits open in flight with no place to go?

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**M**any years ago, after searching and finding the Franklin Sport 90, of which only six were built, I considered myself lucky. I drove to New York in the dead of winter to pick it up. I left Milwaukee on Friday morning and drove almost nonstop to New York. When I got tired I would pull into a wayside, eat a sandwich, and take a nap. I had a perfect alarm clock—it was so cold that in 15 or 20 minutes my cold toes would tell me it was time to hit the road again.

I purchased the Franklin from Bob Dart, who usually bought and parted out aircraft. I don't know how true it is, but the story goes that he supposedly restored it, and on the first flight he reportedly lost it on takeoff or landing and plowed into the brush. His wife probably told him to get rid of it, or else! There was enough evidence on the lower wing to make the story plausible. A picture shows my load on arrival home. I can't conceive how I loaded it and drove it home in one piece. The trailer was a small boat

trailer with 12-inch tires. All four wings were on top of my station wagon. Rather than completely restoring it (I couldn't wait that long to fly it), I did a "powder puff" job to get it in the air.

Having owned and restored other biplanes, I didn't expect any rigging problems. It had as many wires as a birdcage. I rigged it and had it ready prior to the Fourth of July. We had guests on the Fourth for a cookout, and I slipped away after we ate and went for the maiden flight unannounced. The flight was one of two high-pressure adrenaline-pumpers I had with *Frankie*. The long gear gives the biplane a high angle of attack for takeoff, which I failed to take into account. I opened the throttle and found the ground had left me before I knew it. I was quickly learning about a phrase I had ignored for many years—"behind the power curve." I thought I was driving a dog sled. Mush was what I did!

At the end of my runway is tall grass, and the wheels skirted the top

of the grass, slowing me up but helping to lift the tail due to the long gear and the drag well below the plane. The power curve problem was now solved, but I had to get out of the grass. Having a little time in floatplanes, I applied the floatplane rule—lift one foot out at a time! It worked, and I parted a few tree limbs with my wheels on the way out! It was an ominous start of a flight for which I had waited for so long! In the air was a second thrill. I thought I had lost my touch for rigging. I had a spirited horse on my hands, and my wish was to get off it as soon as possible. A quick round trip in the pattern and getting down as fast as possible was now my goal—to keep it level the stick was near the sidewall and the rudder was lopsided. I made it down,

**(Above) On my farm strip west of Mequon. You can clearly see the triangular portion of the rudder removed by the factory to give this example of the Sport snappier handling for aerobatics.**



**After arriving home in Mequon, Wisconsin, with the Franklin Sport.**



**After my “powder puff” rebuild, I flew the Franklin to the EAA convention in Oshkosh. Here it sits on the flight line in 1973.**

but lost it on the rollout. The high grass stopped me with no damage except to my ego. I kept working on the rigging and got the plane flyable, but I found it very attention-prone. I did then fly it to Ottumwa and many summer fly-ins, but it was still not overly friendly to the pilot.

While vacationing in Florida, someone told me of “Slim” Felderman, who had something to do with the Franklin Sport. I was given a possible location—Punta Gorda—and found only one Felderman in that area. On ringing the doorbell, a tall, wiry, and sprightly old man invited me in. I told him I had a Franklin Sport NC13139 registration number. He asked me, “Have you rolled it, spun it, or looped it yet?” In complete surprise I retorted, “No—I have trouble making it behave the way I would like it to.” He snapped back, “That’s your fault.” Having somewhat of an accumulated ego with past restorations, I was taken back. He explained that I was over controlling it, that 13139 had been built for an aerobatic pilot as a showplane. (I later found a fellow who had used it for that purpose and liked it.) Slim carefully explained that to make it quicker on aerobatics, they had taken some of its inherent stability from it, which made it quicker in maneuvers. He asked me if I knew why the lower rudder had an angular piece removed. I didn’t. He explained that the axis of roll is two-thirds up the vertical fuselage tube at the tail and that the lower

part had a negative effect on roll, so they sliced it off, which helped.

I returned home with a complete set of plans and a renewed approach to rigging. Slim said to test the rigging only in still air. If the plane stays level hands-off for two minutes, it is rigged correctly. That I did, and resorted to two-finger control and my first confident enjoyment came about.

The saga continued. On a very mild CAVU (ceiling and visibility unlimited) day I was taking some friends for rides. A dark storm appeared some distance to the north, traveling east. I tied the Sport down near the barn. “No problem,” I thought. We stood under the patio roof on the barn, watching the storm pass, and visiting, when all of a sudden hail the size of golf balls came tumbling down off the roof. First they bounced off the wing of the plane. Then they didn’t—going right through the top cloth and then, finally, through the bottom cloth, too. There stood my Franklin Sport in rags! Back to square one!

I had always regretted my not doing a complete restoration the first time. So I dug into a complete restoration, all the way down to bare steel, new wings—the whole nine yards. Surprises were many. I found one engine lug on the crankcase, which bolts the engine to the mount, had been broken off and reattached with stove bolts through the case with nuts on the inside of the case. J.B. Weld adhesive was used to make it oil tight. I immediately looked at the

logs, and a registered repair station had signed it off. Oh well!

Here we go again. I completed the airframe restoration to show condition. Now came the engine. It took a long time to find a usable case. I lucked into a truckload of Lambert engine parts. Voilà—I had it made and could now complete the restoration. One more curveball to catch. No propeller. I found a new 50-hp Continental wooden propeller, which oddly enough is larger than a Continental 85 hp. I tried it and found that the 90-hp Lambert would not pull it up to the proper static rpm. In desperation I took a Stanley Sureform file and started lowering its pitch right on the plane. I started the engine to test it, then whittled away several times until I got it close to right. I took the prop off, sanded it smooth, and then checked its balance. I tried it again, and it had a little roughness that a wad of gum on one blade cured. After a little more sanding, it was ready for varnish. It still runs smoothly years and years later.

I hadn’t gotten it to Oshkosh all this time and couldn’t wait to do so. With Oshkosh only a few days away, I took off to go. I always fly a few rounds of the pattern listening and smelling to be sure. A slight roughness and vibration had set in. I found the faulty cylinder and replaced it with a spare I had done with the overhaul. After another few rounds, it sounded good, and off I went. I stopped at West Bend to visit Earl



In 1975, EAA photographer Ted Koston shot these three “Birds of a Feather.”

Steer and filled the gas tank with 24 gallons of fuel. Away I went, ignoring all caution and heading straight over the Kettle Moraine State Forest to Oshkosh.

To digress for just a moment—In my restoration I made a new gas tank and had intended to weld it at my company where we did aluminum welding daily. Dale Crites mentioned that since he was the one to sign it off, he would prefer that I have it welded by a registered aircraft welder.

I did that, and it looked fine. Now back to the story.

Right in the thickest part of the forest the gas tank split wide open, and 24 gallons of gas came pouring down the fuselage under my feet. Off went the switch—the short stacks would surely ignite the gas and, “Poof!”

To digress again—Arlo Martine, a very old-time instructor at Waukesha County Airport where I hung out with Dale, once gave me a refresher checkout on this situation, turning off the switch and declaring an emergency landing—I saw a big juicy field right in front of me. “TRAP.” I started a regular power-off decent. Arlo turned the engine back on and admonished me, “Just suppose there is a ditch or something that you can’t see from here, or something worse like large stones. Always hold all the altitude you can until you can inspect the landing site, and then make your decision. If it is good, spiral down military fashion and land. If not, you at least have a second chance.”

Back to the story. I remembered that lesson and looked for what seemed an impossible situation. I spotted a long, narrow clearing some distance ahead that was surely better than the trees. I remembered my lesson and nursed all the altitude I could until I got to the opening. The open-

ing was plenty large and long, but had large pumpkins in it. Knowing how tough the vines are, they would surely trip me on my back. At the other end of the patch was a line of large trees with an opening large enough to go through, and I could see stubble on the other side of the opening in the trees. I carefully spent off my altitude to go through the opening. There was a stubble field for sure, but a hill rose directly in front of me. It is impossible to land up hill with the engine off. I think an angel had its hands on the stick to make a power-off 90-degree turn, 10 feet from terra firma.

I straightened out, and the Sport and I rolled less than 100 feet. I literally escalated out of the cockpit and scrambled up the hillside where I watched the gasoline still running out of the fuselage. An approaching farm tractor that started circling the plane interrupted my thoughts. My fear factor rose fast. I was afraid the tractor could ignite the gas fumes that were all over the ground. I got him away from the plane. We surveyed the problem and went to his house to wait for the gas to evaporate to a safe level. It was lunchtime, and they invited me to lunch. What a farm-style lunch they gave me—pork chops, mashed potatoes and gravy, beans, pickled watermelon rinds, milk, and chocolate cake! During lunch he told me I was the second person to have a forced landing in the same field. I quickly asked, “Who was it?”

“Eagle Rock Joe,” he said.

“Can’t be,” I replied. “I know him!” He was a crop duster who worked the fields in Mississippi in winter, and worked in Wisconsin for Cliff DuCharm in the summer. He got the name because he flew a long-wing Eagle Rock that carried a large

load. Other pilots wouldn’t fly them. The long wings made them dangerous; a quick turn and the long wings could hit ground.

After lunch we gathered some tools and took off the cowling and all hindrances to get the tank out. In the meantime, I had phoned Vintage headquarters at Oshkosh and told them my plight. Before I knew it the Williams brothers, Ken and George, drove down and picked me up, gas tank in hand. The welding school at the fly-in had an old-timer who had welded all the Waco gas tanks at the factory, using hydrogen in place of acetylene. He washed the tank out thoroughly with water, hid behind a post, and struck a lighted torch in the tank neck. When that didn’t result in an explosion, he decided it was okay to re-weld the tank. I was escorted back to the farm, just west of Kewaskum, and we laboriously replaced the tank. I purchased some tractor gas from my “new” farmer friend, and thanked him and his wife, promising to come back some time and give him a ride (which I did).

Back in the cockpit, I pushed the throttle to the wall, dodged some implements left in the field, and took off!

I immediately spotted an ugly rainstorm between my goal and me. I reasoned that it would be a minor detriment to the one that I had just had, so I continued on. I lost only a little leading edge paint and varnish from the propeller.

All at the fly-in had a good time, and the trip home, following the highway, was uneventful.

The moral to this story is *never buy an airplane with the n number 13-13-9 (two black cats and a craps!)*

P.S. Some 30 years later, I am now sprucing up N13139 to go in my collection at Brodhead, Wisconsin. 