

# BIRD'S-EYE VIEW OF A RIDGE SOARING ACCIDENT

Vern Frye, The 1-26 Association Newsletter, Jun-Jul 1985

Sunday, 17 Feb 1985, was a clear day in Reno. A check with our local FAA weatherman indicated easterly surface winds with warming to thermal temperatures by mid-day. Sounded like a day to ridge-soar Dogskin—a mountain located about 25 miles north of Reno. Our club (Nevada Soaring Association) keeps our 2 1-26E's at Airsailing Gliderport, just southeast of Dogskin, so the stage was set.

I arrived at Airsailing, preflighted #932 (572), and moved it to the takeoff position. Our towpilot Gene Eitenmiller towed me off to the south at 1:45, circled left and headed for Dogskin. Turbulence over the valley indicated some thermal activity, but we went for the ridge as per our briefing prior to takeoff. The ridge was working moderately. I released at 6,800 feet MSL (2,500 feet AGL) and started working it. After about 30 minutes on the ridge, Al Hart, another club member, called me from the ground to announce his arrival at Airsailing. I responded that the ridge was working and suggested that he bring our second 1-26 (623) up to join me. He said he would, as my radio started to garble due to a weak battery. I observed Al takeoff and tow up to my position, as I continued to work the ridge.

Al released at 7,300 feet MSL (3,000 feet AGL) and turned towards me at about a 300-foot higher altitude. I turned southbound on the east side of the ridge. Al fell "in trail" and followed. We worked back and forth on the ridge several times, enjoying this special soaring experience of flying along the big boulders on one side and the valley 3000 feet below on the other.

Dogskin, probably like most ridges, is not a smooth mountain. It has many spines and crevices which funnel the air in different patterns, creating alternating lift and sink as you fly the windward side. You must be alert to feel the lift and sink and to move closer or farther from the mountain with the air conditions.

We were southbound, and I was following about 500 feet behind and 200 feet below, when I observed Al fly into a strong lift area (it looked like he was on an elevator) and start a right (downwind) turn towards the mountain. He was probably 300 feet above the crest, and appeared to have enough altitude to complete his 360-degree turn. I made a mental note to advise him when we landed that was a poor technique (my radio was completely inoperative by now). As I entered the same strong lift area, I started a left (upwind) turn away from the mountain. As I was completing my turn, I was watching Al about 180 degrees through his when suddenly his nose dropped about 70 degrees, his right bank steepened, and he seemed to tumble towards the flat mountain crest. His right wing tip hit a big rock, then the nose dug in, and the tail slapped down hard. I figured he had just "bought the farm." I then flew a couple of passes to check for pilot movements, and saw none. Unable to maintain a position from which I could see the downed glider, and with no communications, I dove eastward at redline speed. I was on the ground at Airsailing in :02 flat. Gene met me, heard my explanation, and we both jumped in the towplane to go back up and see what we could about Al's condition.

While climbing towards Dogskin, we tuned in Reno Approach Control, advised them of the accident, and requested a medical helicopter be dispatched immediately. The controller (Ken Pender) did a beautiful job of pinpointing the crash site, coordinating the medical chopper, and getting us into visual contact with minimum delay. As Gene and I approached the accident site, we flew low directly over the

glider. Al was sitting in the cockpit and waved to us! I could have kissed him! He was ALIVE. We still didn't know his condition, but kept Reno Approach advised and circled the site until spotting the chopper approaching.

The chopper flew right over the downed glider and didn't see it!—it blended into the mountain almost perfectly (a good argument for brighter color paint schemes). We called the chopper pilot and vectored him back to the site. He spotted the glider on the second pass. Then he, very skillfully, landed in 40 mph wind conditions among the big rocks and discharged a flight nurse who hurried to the glider. The chopper hovered off to the side awaiting her radio instructions as we continued to circle overhead.

The nurse reported Al was pinned in the cockpit, but was coherent and appeared OK. HOORAY! The chopper flew down to the valley and picked up a couple of Washoe County "HASTY" rescue team members who were arriving in their 4x4's. They brought a crowbar and promptly extricated Al. They then put him on a stretcher and hauled him off to Washoe Medical Center for treatment.

When I arrived at Washoe Med., Al looked at me and said, "I goofed." He did, but what a price to pay for one "goof!" The hospital is taking good care of him---no broken bones or cuts, just lots of bruises and an erratic pulse rate as this is being written. We expect a full recovery for our 70-year-old club pilot.

Lessons to be learned? I dug out my Joy of Soaring and reviewed its ridge soaring instructions. Page 87 states, "At a comfortable distance away from the slope or above it, the speed for minimum sink is most efficient." Look out for this one---Al was above the slope by about 300 feet and was maintaining slightly above minimum sink speed. That wasn't enough to allow a recovery when he drifted into the lee-side sink. I strongly recommend flying at best L/D speed when ridge flying to allow a safety margin for the violent and unpredictable wind patterns encountered on an irregular ridge. Page 88 states, "Make all reversing turns away from the ridge, i.e., into the wind. A downwind turn toward the slope is liable to force the glider into the hillside." I would add, "When your altitude is higher than the hillside, turn into the wind as the wind may drift you across the crest and into the lee-side sink (like it did to Al), where a recovery may not be possible." Finally, give the ridge lots of respect. Those solid rocks have probably been there for thousands of years, and we're just momentarily riding by. They'll probably still be there in another thousand years, but our fate for the few minutes we're up there depends on our skill and our caution.

Someone once said that the sky is not inherently dangerous but, like the sea, is terribly unforgiving of mistakes. A bird's-eye view of one mistake is enough for the rest of my flying years! A special thanks to Gene Eitenmiller (tow pilot), Ken Pender (Reno Approach), the Care flight crew, the "HASTY" team, and the Washoe Med Team for creating a fairly happy ending to this glider accident---you were all GREAT!