"A motor on a sailplane takes all the excitement out of cross-country flying," say the critics. But this flight provided soaring adventure – and good mileage, besides.

58 Miles per Gallon

by RAY ELSMORE

Like most *Soaring* readers, I enjoy the flight stories that appear in our Society's journal. But as the owner of an AS-K 14 (Schleicher's powered adaptation of its popular Ka-6) I kept wondering why there were so few motorglider stories until it occurred to me that there are actually very few of us motorglider pilots, and so I offer this account of what for me was a memorable cross-country experience, in the hope that its publication will get the ball rolling and at the same time give members some insight into power gliding and soaring.

We'll have to go back a little in time, because my flight took place in August of 1970 after I had received a long-awaited call from Chuck Nichols who had a glider trailer building business at that time. The light crate in which my AS-K 14, *Sierra Papa,* had been shipped (by air) from Germany had been discarded, and I ordered a trailer from Nichols. There was only one problem—*Sierra Papa* was hangared at Truckee/Tahoe Airport in the high Sierra and Nichols' business was in southern California nearly four hundred miles away. But I told him I could fly into his area on the 17th, and asked where he would like me to set down with the ship.

He suggested the *street* in front of his shop. I told him that my ATR was rather valuable to me—that I was not about to risk losing it by making an intentional landing on a city street. He replied that El Monte was the nearest airport to his shop, and that his men could meet me there with a flat-bed trailer to which they would rig temporary supports for the trip back to his shop. I told him that I would phone him at his home, from wherever I should happen to be on the evening of the 16th, to arrange a meeting time for the following morning at El Monte.

On the evening of the 14th I traveled by Greyhound bus from San Francisco to Truckee, carrying along some charts and the charged battery. After a night's rest at the Alpine-Riverside Hotel, one of the owners drove me out to the Truckee/Tahoe Airport.

I rolled *Sierra Papa* out of the hangar and ordered out the gas truck. Just two gallons topped off the five-gallon tank—probably the smallest fuel sale that line boy had ever made! With the battery installed and two quarts of two-cycle oil stowed, I was ready to go. I hoped to fly 325 miles to Lancaster (Fox Field) and rent a car the next day to drive out to the site of the Nationals which were being held at nearby El Mirage. I would soar whenever possible, but planned to use the engine when necessary to keep moving. Also, if necessary, I would stop at an enroute airport for more fuel.

It was Saturday, and several pilots had their ships assembled at the end of the runway. As usual, each pilot was waiting for another to take the first tow to find if the thermals were working yet. I volunteered to test the conditions and radio back the results. (Even while climbing under power, it is easier to detect lift or sink in the 'K-14 than on aero tow.)

I took off at 11 a.m. sounding like a motorcycle and started climbing toward Mt. Rose. Passing south of the peak at 10,000 feet, I killed the noisemaker, feathered the prop, and started my journey south. I radioed back to the airport that I had passed through a few weak thermals which I didn't think were workable yet.

Gliding toward Minden I spotted a large hawk circling. I quickly joined him and started circling in moderate lift. At one point my right wing passed about 30 feet beneath the hawk. To my surprise, that crazy hawk got downright mad at *Sierra Papa.* He went into a fast dive toward my right aileron, talons out and beak open. It occurred to me that he might be too much for the delicate aileron. So I did a zoomie out of his territory, muttering to myself, "Nasty hawk, you can have your damned thermal."

The remainder of the glide across the Carson Valley would have provided perfect conditions for some of Paul Bikle's performance tests. Not a ripple. Just south of Gardnerville I fired up the mill again.

I climbed to 10,000 feet again and shut down over Topaz Lake. I glided southeast toward the hills east of Highway 395 and found some weak thermals over the hills. As I circled in these it seemed that I was usually in zero sink or falling out of those that gave me a little plus on the vario. I sank closer to the hills, easing downslope toward the narrow canyon through which Highway 395 passes in that area and still hoping for that good one that would get me up and out of there.

I didn't find the good one, but soon found myself at about 150 feet over the highway and river. I jerked the

PAUL CHELEW

recoil starter and the engine started on the first pull. As I usually do on airborne restarts, I went into level flight with the engine at idle to warm it up. About four seconds later it stopped abruptly, without even a sputter! It sounded rather final to me, as though there had been some internal failure.

I am still amazed at how fast the human mind can work in a tight situation. While reaching for my first pull on the start handle, I analyzed my situation and made a decision. I had enough time for about five tries at a start before I would be down. The highway below was almost bumper to bumper with cars and campers. Even with no traffic, I would get both wings on this narrow stretch. The river, bordered by trees, was also too narrow. I decided I would make a maximum of three tries for a start. If these failed, I would make a diving turn to the left toward the steep slope there, and then pull up and stall into the treetops. This would probably destroy the ship, but would give me a fair chance to get out without injury.

I pulled the starter and got a slight sputter. I pulled a second time and the Hirth engine putt-putted to life. My heartbeat almost matched the tachometer reading as I climbed out of that canyon. I had learned a lesson—one which I should have learned from the pilot's handbook in the ship: One should fly the 'K-14 like any unpowered sailplane. When getting low the pilot should always put himself in a position to get into a suitable landing field. The two-cycle, hand-start engine is just not all that reliable. I have practiced what I learned there on all subsequent flights.

Once out of the canyon, I climbed toward a 9600-foot peak 25 miles west of Bridgeport. Nearing the peak I hit a good thermal and centered it on "tow." After "release" the vario showed a 1200 fpm climb. Since I had not yet installed oxygen in the ship, I had set myself a maximum altitude of 13,000 feet. I quickly reached this altitude and headed toward the magnificent build-ups I could see over the Sierra. I was down to 10,000 feet when I reached them, but climbed quickly back to 13,000 feet.

I was attempting to maintain the 75-knot maximum rough-air speed as I flew toward Bishop. Then I hit a real boomer. The Ball vario, set on the high range, pegged out at 2000 fpm. By the time I got the situation straightened out, using spoilers, I was at 14,000 feet. So I upped my mental maximum to that altitude and managed to stay there with occasional use of spoilers. Sometimes I lost a little altitude between thermals, but quickly regained it in the next without circling.

With my 105-knot true airspeed I hardly noticed Mono Lake as I zipped past it. Passing west of Bishop I could see overdevelopment over the Sierra ahead, but conditions still looked good over the White Mountains on my left. Just south of Big Pine I turned and started penetrating across Owens Valley toward the Whites. I was soon in enormous sink with the vario pegged out at 2000 down. I had left the Sierra at 13,000 feet and arrived over the foothills of the Whites at 6000 feet.

Since I had made good time so far, I was determined not to restart the engine unless that was the only alternative to a landing. I found no thermals at first, but was able to ridge-soar in some areas, gaining a few feet on each pass. I scratched in this area for 45 minutes before finding a decent thermal at 8000 feet. I was soon at 13,000 feet at cloudbase over the Whites.

I started picking up transmissions from some of the contest pilots at the Nationals flying a task over the Mojave Desert. I soon learned that most of them were falling out of the sky. They were calling their crews to tell them where they expected to land. This was bad news for me, since it meant that the thermals were dying rapidly on my course ahead.

As soon as I left the southern end of the Whites I lost my lift and started a long glide. Several miles south of Owens Lake I had to start the engine again. I climbed to 8000 feet and shut down, planning to lob the ship with alternate climbs and glides. The fuel in the fiberglass tank behind me was so low that I couldn't see the level while in climb. The tachometer showed one hour and ten minutes of engine time since Truckee, and the handbook said I should get two hours on a tank of fuel. Then it dawned on me that the book referred to cruising flight at lower altitudes. I had been using only climb power and, with no mixture control, my fuel consumption would increase along with a decrease in power output at higher altitudes.

I decided I would get best fuel economy by cruising in level flight 1500 feet above ground level. Gliding past Inyokern I was tempted to land for fuel, but seeing no activity on the airport, I decided they must have shut down for the night. I leveled off at 5000 feet and started the engine to go into cruise for my first time in this ship. I was surprised to find that I had to reduce the throttle almost to the idle position to maintain the recommended cruise rpm. Indicated airspeed was 80 knots.

I altered my hoped-for airport to Mojave, which was 20 miles closer. I felt no thermal activity, since the large clouds to the south were casting shadows below me. I was over Highway 395, holding my breath and worrying over the fuel I could no longer see, when I spotted Mojave about ten miles ahead. Just seconds later the Hirth gulped the last of the gas.

I estimated that I had about 2000 feet AGL at that point. There was nothing but sagebrush for several miles either side of the highway. Further east I could see several fields which appeared to be landable, but a landing there could mean a long walk to the highway. There was also sunlit desert to the east, so I headed that way.

I passed through small patches of lift and then found a weak thermal over one of the fields. This one gave me 1000 feet, so I decided to venture still farther east. Suddenly, I spotted a very welcome little airport close ahead. Hoping that it was not a mirage, I pulled out my chart. It was real—California City Airport which I had failed to notice while plotting my course.

I spent the next 15 minutes working weak lift in the hopes of getting high enough to go on to Mojave. Failing in this, I gave up and landed on the taxiway where my rollout would get me nearer to the tiedown area. There was not a soul at the airport, and the town was about five miles away by road.

My landing was at 6 p.m., seven hours since Truckee. I drenched the desert sand beside *Sierra Papa* and then pulled out my charts and computer. The direct-line distance measured 290 miles. The computer told me that my average groundspeed had been 41.4 mph and attained fuel mile-

age was 58 to the gallon. However, the tachometer revealed that the total engine time had been only one hour and forty-five minutes. One could not expect such mileage on a no-lift flight.

After tying the ship down for the night, I entered the deserted terminal building and found a pay phone. I could find no listing for taxi service, so I used my only change to make a call to one of the three motels in town. The clerk advised me that there was no transportation service in town, not even by the motels.

It was a long hot walk into town. Once on the main road connecting California City and Mojave, I tried hitchhiking but cars passed me. No luck. Then I checked the three motels for a vacancy and had no luck again. Finally I climbed onto a barstool in one of the motels and told the bartender my predicament. He said he would ask around a bit and see if anyone there who was planning to drive into Mojave might give me a ride. His first try was another no-luck deal, but he told me to wait around, the right party was bound to turn up later.

Wait around I did, from 8 to 11 p.m., sucking up vodka-tonics. Finally he found two men who were headed that way and I got my ride to Mojave. Thanks a lot, whoever you are that helped me, but I really didn't need any more thrills that day. The driver was even drunker than I, and we had a thrilling 15-mile drive. Next time I try hitching a ride in a bar it will be a milk bar.

The next morning I asked the motel clerk how I might get a ride back to California City, since I had learned the night before that even Mojave had no taxi service. I told him how I had arrived in a glider. It turned out the clerk had a friend whose little boy had never seen a glider. The friend was glad to drive me out in exchange for a look at *Sierra Papa*. He even ran my wing on takeoff—the father, that is. A few minutes after takeoff I found a thermal and feathered the prop, to begin a leisurely one-hour flight to Fox Field, my original destination.

I would have flown right on over to El Mirage except that I felt I might not be welcome with my ship on the crowded field, and I didn't have a sleeping bag with me. While working my last thermal, over Rosamond Dry Lake, several contest ships zoomed in under me and started circling (I learned later that this was the first turnpoint of the day's task). I had more than enough altitude to make Fox, so I got out of their way and made large lazy circles around the contestants. It was a beautiful sight. As I glided down and they climbed, I had a close look at each of those long-winged birds.

I contacted Unicom before landing at Fox Field, where I received excellent treatment. Upon landing an attendant met me at the runway edge in a jeep, and helped me push the ship in and tie it down. The overnight charge was only a buck, even though *Sierra Papa* filled two regular tie-down spaces. I had reserved a rental car by phone that morning, and there it was, ready for me at a very reasonable rate.

I expected that I could easily drive to El Mirage before the contestants started returning, so I stopped for lunch in Palmdale. Past Palmdale I got lost several times and had to backtrack. Then a heavy thunderstorm came crashing down on me, making navigation even more difficult. By this time I figured nobody would be able to finish the task anyway, since they certainly couldn't make it back through rain like I was driving in.

When I finally found El Mirage it proved to be just on the edge of the thunderstorm. The ships were in and almost all the pilots had completed the task. I borrowed some trunks and joined the bunch in the swimming pool.

That night, after taking a motel room in Lancaster, I phoned Nichols and arranged to meet his men at El Monte at 10 a.m. the next day. I was airborne at 9 a.m. and climbed to 7000 feet to cross the 10,000-ft. San Gabriel Mountains. Shutting down at that altitude also gave me plenty of time to search around in the smog for the unfamiliar airport. Since the Wilson Observatory was almost on my course, I made that my first checkpoint in the Los Angeles basin. Finding the observatory was easy, but El Monte was something else again. I was down to about 2000 feet when I spotted the airport, grateful that I did not have to start the machinery again.

I landed at about 10:00 a.m. and had hardly rolled to a stop off the runway when Nichols' men pulled alongside with the big trailer. They told me that they had stopped to tell the airport manager that they were expecting a glider and to ask where they might disassemble it without being in the way. His only reply had been, "Forget it. We don't allow gliders to land here."

I had really hoped that he would come over and try to hassle me while we were working. I was ready to give him a brief education on regulations and federal airport monies. But he didn't show. Perhaps he got his brief education from somebody else in his office.

After graduating from Stanford with a degree in English, author Ray Elsmore promptly entered a career as an airline pilot. This occupational *non sequitur* was followed 20 years later by another when the foreign airline which employed him upped its airman physical standards—and suffered major crashes. Elmore, who holds a 1st Class FAA Medical, had already been released because of slightly defective color vision.

Previously he had been flying the polar route between Europe and Japan, and during the long hours over the Great Circle his thoughts frequently turned to gliders. Finally he got around to taking a couple of flights from an FBO—and was soloed after his second. His tenth flight was in a 1-26 in the Sierra. "I was hooked," he says. Soon after this he bought his motorglider ". . . partly because I had no crew—no drivers in my family—and had no chance for cross-country flights."

Recently he was offered a DC-8 captaincy by an airline, but during his hiatus he had returned to college as a graduate student in journalism and rediscovered his interest in writing. "After some soul-searching, I realized I didn't really want to go back to living out of a suitcase . . . I thanked them but declined their offer."

Elsmore contributed this story to *Soaring* as an SAA'er, but he is now free-lancing. He concludes: "I have recently put *Sierra Pappa* up for sale—not that I don't still love the ship. It's a matter of not being able to keep up the insurance. . . . I may take a shot at hang gliding."—Statements not to be mistaken for *non sequiturs*.