Illustration by Beckendorf

From the time I climbed into a waiting Mooney Mark 21 at Lockhaven, Pa., bound for Boston, freakish weather seemed bent on turning a routine transatlantic ferry trip into a nightmare of violence, jangled nerves and near death.

Certainly, had I known on Dec. 17 the frightful experience in store for me, I would have turned on my heel and marched straight home to enjoy the pre-Christmas holidays with my family beside a warm fire and a brightly lighted fir tree.

As it happened, I departed Lockhaven on a Sunday in a red and white Mooney Mark 21 painted with the Swiss matriculation numbers HB-DUV. My flight plan called for spending the night in Boston, then proceeding nonstop across the Atlantic by way of Gander, Newfoundland, to Shannon, Ireland, and on to Zurich, Switzerland.

A few days earlier my boss, Max Conrad, had picked up the Mooney at Kerrville, Tex., where the aircraft is manufactured. He intended to fly the overseas ferry trip, but had to cancel out due to conflicting plans. The aircraft was to be delivered to Edwin Ott, Mooney distributor in Zurich.

I was disheartened with the weather prediction given to me by the oceanic forecaster at Logan International Airport in Boston. The flight from Lock Haven had been routine, although I switched to instruments about halfway on this leg of the trip. Boston, when I arrived, was IFR, and a long range weather forecast called for a large low pressure system directly on course to Shannon. My alternate choice was the great circle route via Newfoundland and Nova Scotia to Santa Maria in the Azores.

The view from the window of my room at the airport motel the next morning dashed water on my hopes for clearing local weather. Freezing rain spattered against the glass, alternating with a fuzzy wet snow which quickly ice-hardened. One hapless motorist in the parking lot tried ineffectually to break the grip of ice on his rear tires, but finally gave up and slogged off toward the coffee shop.

The tower weather forecaster told me on the phone not to expect a letup in the freezing rain.

"Visibility," he said, "is about one mile, ceiling closing fast at 400 feet. If you are going to go, I suggest you get started before it really closes in."

Quickly I reviewed the information I already had on weather conditions. According to his prediction, the low pressure area which blocked my original flight path direct to Shannon from Gander, Newfoundland, extended north, but could be circumnavigated if I flew the first leg of the trip at a right angle to it. This meant I must take off from Boston IFR, climb through the mushy ceiling, then head north over Canadian coastal waters. Finally, I would have to swing on a 90° vector to the right. This course should take me below and south of the low pressure system.

I had no desire to fly in a thunderstorm or to get into ice. Even so, it was probable I would experience some turbulence along the fringe of the low pressure system for perhaps 100 miles.

I stopped long enough to buy sandwiches for the trip and orange juice, then with the help of a line boy scraped about four inches of wet snow and ice from the aircraft.

Twenty minutes later I was airborne in the Mooney, and despite an overweight condition—gross at take-

A trailing edge on the airplane, shown in the first picture to the right, indicates by char marks gouged into the metal the force of electric energy. The pilot was rendered unconscious for half an hour after the electrical explosion which occurred during a transatlantic crossing

At the far right, left wingtip of Mooney Mark 21 shows scars and sear marks of its encounter with hot bolt of static electricity

Photos by T. Heimgartner, Zurich, Switzerland

After 23 crossings, this ferry pilot regarded transatlantic flights as routine. A torrid tangle with a bolt from the stormy blackness taught him differently

Over The Atlantic

off was 2650 pounds—the compact little aircraft lifted off the runway easily. There was enough fuel aboard to run nonstop to Rome, Italy. I would far rather be overweight than risk low fuel reserves.

Out of long habit I checked the time on my wrist watch. It was 17:42 Zulu hours. Dec. 18, just seven days before Christmas. I had promised myself that I would be back in Lock Haven for the holidays, so in a good luck gesture I knocked on the instrument panel of Mooney HB-DUV.

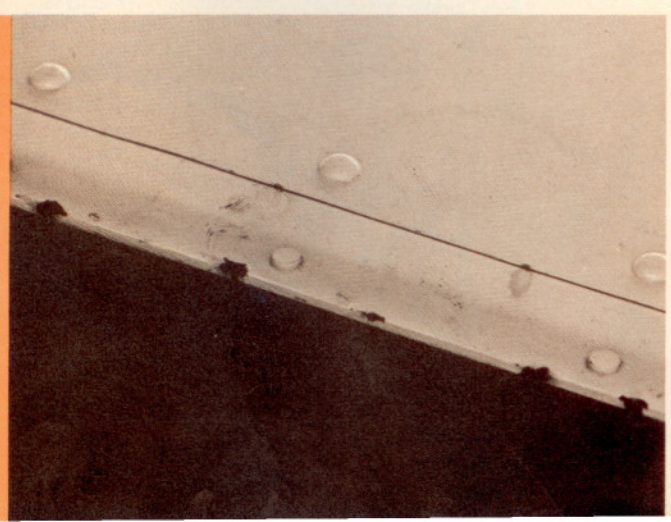
This, I told myself, would be my 23rd transatlantic crossing piloting a light plane. Some had been twins, others single engine aircraft like the Mooney Mark 21. Without exception, the crossings had been trouble free. I attribute this success to deliberate precautionary measures in marginal decisions on flight conditions. Only once in all those flights had I experienced one heart-in-the-mouth moment when the right engine on a small twin enroute from Bermuda to the Azores decided to quit running. But it started again.

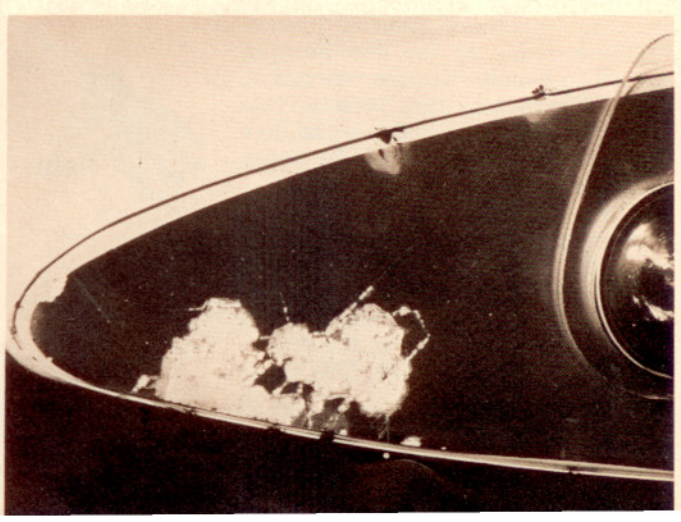
The route I had checked through from Boston to Zurich would look like a long curve on a map or globe of the world. Tracing the line from Boston it swung directly out over the Atlantic, south of the low pressure area bearing down from Canada, then curved toward a pinpoint speck in the ocean named Santa Maria Island. From Santa Maria the line route straightened sharply to Lisbon, Marseilles and Geneva.

Santa Maria, in the Azores, is 15:10 hours and 2,500 statute miles from Boston. Visibility as I reached assigned altitude of 5,000 feet was still only about one mile and I had

(Continued on page 58)

by KENNETH L. ANDERSON / as told to AL BACON
AOPA 154797





Nightmare

(Continued from page 33)

no definite overhead fix. I had to rely on low frequency stations at Nova Scotia and Newfoundland to give me approximate positions.

There were still several hours of daylight and patches of visual flying weather were interspersed occasionally for half hour intervals with a leaden overcast.

Approaching ocean station Delta, I was on instruments steadily. A few minutes earlier the sun had set and the after-glow now spread a darkly pink haze, coloring the white wings of the Mooney with a copper caste.

Boston was now 4½ hours behind me. There was no light left and I was worried because rime ice was forming. Outside air temperature was minus 3° Centigrade. Ahead now, in a darkened sky, flashes of lightning ripped through cloud layers with zigzag streaks. Power setting for the Mooney was at 75%, indicated air speed 135 m.p.h. Gasoline consumption was about 10 gallons per hour.

In the next 15 minutes air speed slowly dropped to 105 m.p.h. "What if it goes lower," I thought. "It can't. Try for another altitude. No, wait. There may be rains up ahead or a clearing."

I thought about lunch, then pushed away the desire to eat. Time enough when I cleared out of this icing zone.

Silly things pop into your head when you are worried or scared. I found myself singing a parody on the song, Wagon Wheels.

"Roll along little Mooney, roll along. ."

For an hour HB-DUV crept through the sky with no increase in speed. Ice was still piling up, but the needle on the airspeed indicator didn't record any more loss. My little Mooney was carrying the added ice fine. I began to feel more cheerful. When finally the airspeed began to register a gain, I relaxed back into my seat. The back of my legs started aching and I realized I had been pushing with my feet to get more speed out of the plane.

At this stage, I recalled hangar talk at Lock Haven about the neophyte flyers who for years used to take off from Newfoundland in single engine planes. I am no novice at trans-atlantic crossings, but I shudder to think of those thoughtless fledglings who hoped to make the trip either in the spirit of daredeviltry or in the quest of a new record. Too many of those inexperienced flyers had to be fished out of the Atlantic. The Canadian government finally called a halt to this type of adventure. Now, no single engine aircraft is permitted to take off from Newfoundland.

Somewhere around 42° west I brought out the sandwiches and orange juice. Heavy rain showers peppered the Mooney HB-DUV, but with the tight cabin insulation the sound was distant and pleasant.

It was almost 11 hours since takeoff. Looking through the cabin windows, I watched darkness pile together in thick layers. Up ahead electrical thunderstorm activity fractured the sky with spiderweb fingers of light.

Suddenly, small bolts of electricity start to dance on the windowshield. It is a phenomenon I have seen before, so I didn't worry about it.

Ancient sailors in the Mediterranean first named this freak of nature St. Elmo's Fire. They interpreted static electricity on the yard arms and masts of their ships as the visual sign of their patron St. Elmo's guardianship.

The few times I had seen St. Elmo's Fire before this provided no reason for uneasiness, but soon I realized this was something unusual.

The fire had spread. Little bolts played and jumped more rapidly on the windowshield.

Suddenly, more fire blossomed on the propeller tips like blue buzz. In a few seconds the fire spread from the propeller outward from the leading edge of the wings, 12 inches or more. It seemed to increase in size, growing, resembling the exotic, sharp-pointed blue leaves of some strange plant, touching the metal skin then leaping forward into the darkness.

It must have been only seconds, but it seemed hours as the flames grew more riotous, when I felt, rather than heard, a terrific explosion.

I remember three things before my senses left me: glancing at the altimeter which recorded 9,000 feet, the sensation of being roughly pushed by a heavy hand into my seat, and thinking sadly that I would never spend another Christmas at home.

I recovered consciousness with the distinct knowledge that I had been spared death in the sky for a more prolonged one in the icy North Atlantic. This feeling persisted for a long while and it seemed useless even to try to find out what the condition of the aircraft was, or even whether I was injured.

It must have been a full 10 minutes before I realized I was still alive and in no immediate danger of going down. Then I began to check damage and try to figure out what I should do to stay up.

The air inside the cabin had the odor of burnt metal. I remember thinking it smelled like the fumes from oil when you plunge a piece of red hot metal into it. I tempered a homemade knife once this way.

INCREASE THE VALUE OF YOUR PLANE

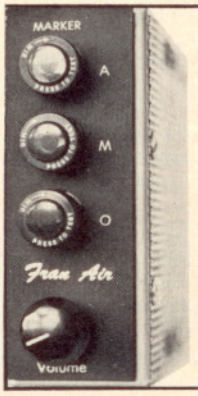
A Flying V Interior adds quiet, luxurious comfort and beauty to your plane.

- Aircraft Seat Manufacturing
- Aircraft Modification and Interiors

FLYING V INTERIORS

Meacham Field, Ft. Worth, Texas
Bus. Ph. MA 6-5251
Res. Ph. TE 8-2448

Circle no. 148 on reader service card



3 LIGHT MARKER BEACON RECEIVER
with volume control
$167.50
Self-powered • 12 or 24 Volts • Press to Test • Light Dimmers • Horizontal or Vertical • Compact • Light • Plug-terminated, Fully Remote Model FMR-2RP $186.45.
WRITE:
Fran Air PRODUCTS, INC.
Box 478P Pawtucket, R. I.

Circle no. 106 on reader service card

Fly to the **NUT TREE RESTAURANT**
for Western Food, shopping and a ride in our big bright new train. Open daily from 7 a.m. to 9 p.m. 1900' Airport with Unicom 80/87 and 100/130 Octane. Nut Tree Airport Vacaville, California
(Sacramento Sectional)

Circle no. 54 on reader service card

The small storm window in the side windowshield of the aircraft let in a blast of cold air. It felt good and cleared the cabin quickly of the burnt metal odor. I located my flashlight under the pilot's seat and discovered with amazement the extent of the damage. As I looked, my knees started shaking again. I couldn't control them.

The trailing HF copper cable antenna was burned apart at the cabin outlet on the right floorboard. The glove compartment door had been flung open. I would have to use matches if I wished to smoke because the cigarette lighter was missing. (Later we found it under the back seat lodged against the baggage compartment wall.)

On the right front seat what had been owner's papers, flight maps and several memoranda was now a charred and crinkled mess.

All the upholstery on the right front seat was burned and blackened. The foam rubber beneath the fabric covering clearly showed through, a discolored brown.

On the floorboard near the burned antenna cable, discarded waxpaper from my sandwiches had shrunk and blackened. The steering yoke on the passenger side of the cabin had yellowed.

Worst discoverey of all was my own right arm. I was wearing a short sleeve shirt. All of the hair was singed from the elbow down to my fingers. Several ugly burn welts puffed out on my skin and one of them was cracked and bleeding.

Most disconcerting on the list of discoveries was the visual evidence of the length of time I was knocked out. The altimeter showed 12,000 feet. At an indicated air speed of 135 m.p.h., I had been unconscious for at least 30 minutes!

The aircraft was not equipped with an autopilot, so why didn't I go down? My guess is that when I was slammed back into my seat by the explosion I must have unconsciously pulled up on the steering yoke, putting the aircraft into a gradual climb. I remember waking with my hands still fastened on the yoke. This action had saved my life.

It was not until much later that my thoughts zeroed in on the auxiliary gas tank perched ominously behind me, occupying the area for the rear passenger seats.

Mediterranean sailors claim St. Elmo as their patron saint. I claim him for mine too, and thank God the gas tank was vented, and not full of gas. I estimated there was 30 gallons in the tank at the time of explosion. I still shiver a little when I think what might have happened if there were more amperes in the electrical explosion.

I also counted myself lucky to have the aircraft's ADF and VHF radios working. Without them I would certainly have had to ditch. I could never have found the Azores without them. As it was, my HF was inoperative and it would have to be replaced before I could leave the Azores, once I landed.

Four hours later I sighted landfall at Santa Maria Island, grateful beyond words to put my feet on solid ground again. No one has ever welcomed a bed and deep comfort of an exhausted sleep more than I the night of Dec. 19, 1961.

The following day I searched in vain for an HF radio replacement antenna. None was to be found. I had about decided that I would have to spend Christmas on Santa Maria when a friendly DC-3 pilot volunteered to relay my positions as far as Lisbon on his HF transmitter.

We were cleared with this understanding and took off together.

Before leaving I told him my story. He echoed my own unspoken thoughts, "You are lucky to be alive." He also advanced one explanation of what could have caused the explosion. According to him, Mooney HB-DUV began to accumulate an electrical charge about the time it entered the thunderstorm area at 42° west.

"Friend," he said, "you were a flying storage battery."

The explosion, he figured, occurred when the Mooney became overcharged with positive ions.

"At one time you were probably carrying two to three million volts of electricity, but amperage was low. You can figure you were perched on a high powered, low current hot seat."

From the Azores to Lisbon, I was

$ BOB CARR • JACK WA
WE CAN
$ * $1,010,0
FOR CLEAN A
$ • ANY MAKE OR M
• WE VERIFY BIDS T
• WE OWN EVERY
$ PHONE AREA CODE 601 EX
$ JACK ADAMS AIRCR
Twinkletown Airport—W
Ten Miles South of Memphi
$ * RESOURCES—REFERENCES: First National
dock Acceptance Corporation, Memphis, Tenne
We Arrange Financing in all of the Unite
Canada—
MAIL TO
I want to ☐ SELL ☐ TRADE ☐ BUY • My Pl
Engine Time SMOH
NAME
ADDRESS
CITY AND STATE
Circle no. 109 on reader

able to keep the DC-3 in sight and VHF contact was excellent for the balance of the trip to Zurich.

Zurich Airport informed me that I would have to go in on IFR with a ground control approach. Visibility was half a mile with a ceiling of 200 feet. The talk-down by the Swiss ground crew was simple, and on landing I was met by Edwin Ott, the new aircraft owner.

Later, after dinner and a shower, we examined the aircraft closely. Evidence of the experience was plain to see. Char marks showed on the wing tips. In many spots the metal appeared to have been scored with a sharp instrument. But other than these disturbing signs of a violence I will never forget, Mooney HB-DUV was in excellent condition.

I feel I have entered the ranks of an old fraternity; of those men who sailed the ships wierdly lighted at night by the guardian fires of St. Elmo. I feel in league, too, with the saturnine men of the old Southwest, whose night sleep has often been shattered by a stampeding herd scared into flight by the vision of a lead steer, shaking gigantic horns ringed in a blue, fiery haze.

At home, close in our own island of cheer, Kenneth Anderson and his family last Christmas dutifully gave thanks.

END