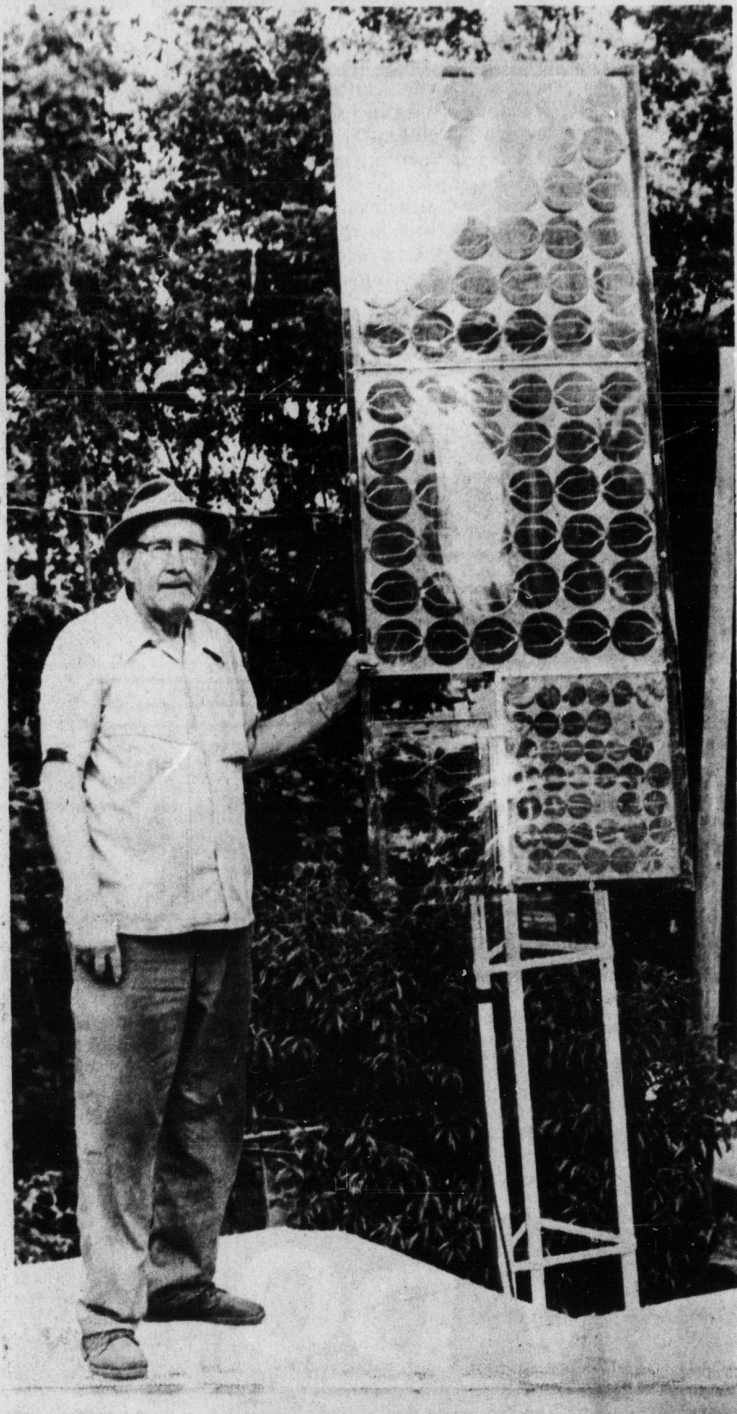


God Supplies The Materials. . . . We Have To Figure How To Use Them



Roy Holloway, the inventor. . . .

By KATRENA McCALL
Staff Writer

Did you ever wish you could sit down, come up with a brilliant invention and retire on the royalties?

That is exactly what Roy Lee Holloway of Rt. 3, Kings Mountain did. Only with Roy it isn't one invention, but 21.

As a result of his 21 patents, Roy says, "I haven't really worked for anyone in 55 years."

From Madison County, Ga., Roy has lived from Lowell, N.C. to Greenville, S.C. to San Francisco, the latter for 43 years with his wife. The Holloways settled in Kings Mountain about six years ago; and at 69 Roy is still going strong. "I tried retirement once," he said with a grin, "but it wasn't much fun."

Roy admits many of his inventions were born out of necessity. Owning two body shops and three automotive manufacturing firms in California, he occasionally came upon a job for which his equipment was simply inadequate; so, Roy went to the drawing board to invent something that would do the job. He is responsible for such useful tools as self-cleaning rotary files, a butane-powered underseal and paint remover, a silent hammer for sheet metal and auto body work, hydraulic motor, and a flexible head for grinding machines.

His latest invention, however, is something related to an important subject these days - energy.

Roy has come up with a unique, inexpensive solar power system with which he powers his entire home, including a ham radio. The exception is his well and refrigerator, but Roy said he is working on a system to convert those items to solar energy.

The uniqueness of his system lies in the fact he uses the 108 solar cells on his roof to charge regular car batteries that he keeps in a corner in his house, and then feeds the DC battery power through a special converter that he designed (and on which the patent is pending) to produce the AC current necessary to

power his house.

With this system Roy says he can provide the power necessary to meet most of his energy needs with one regular car battery (but recommends keeping two, "just in case.")

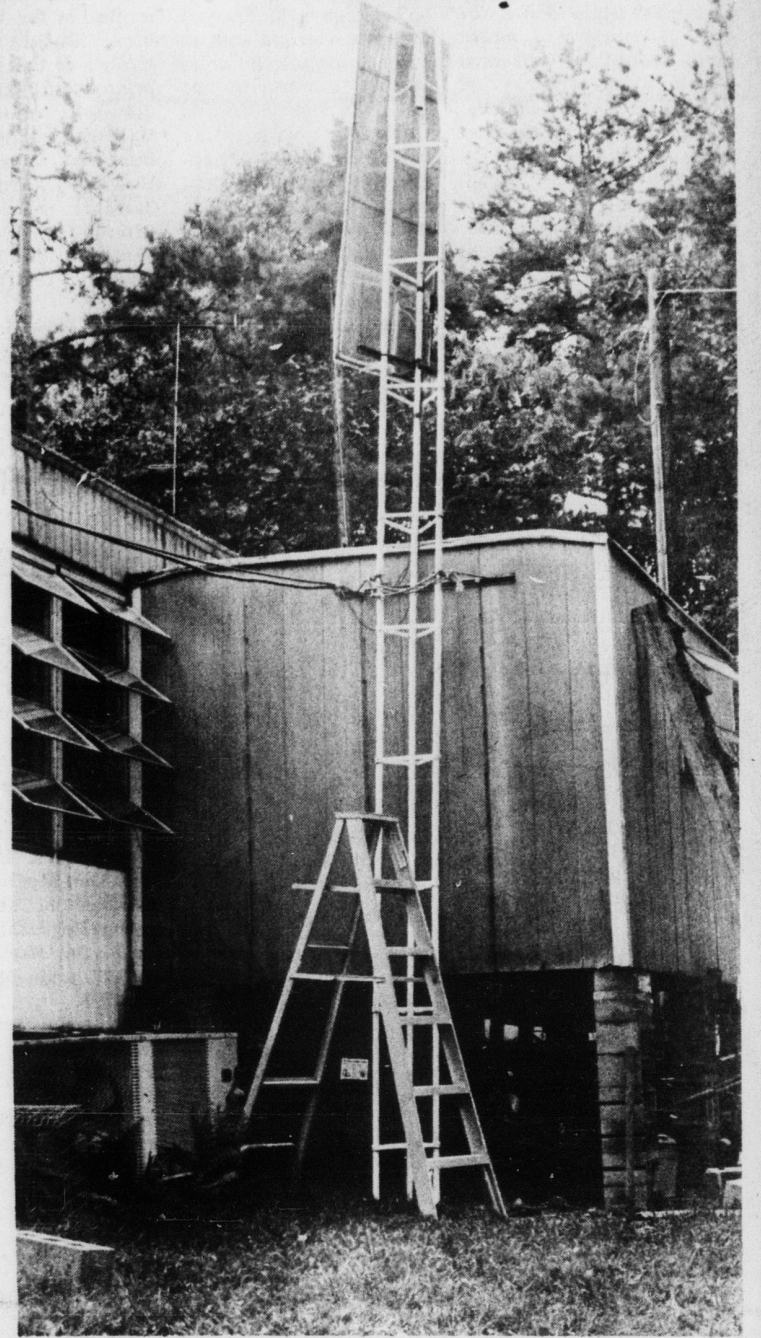
The solar cells can produce 45 volts and 13 amps which are capable of keeping four batteries fully charged per day, with the unit operating from 7 a.m. to 8:30 p.m. "To put it simply, one battery will burn a 150 watt bulb for up to four days," he says. The 120 AC converter can be hooked directly to the main power wire feeding the house.

The major advantage of this solar system, compared to the more conventional solar units, lies in its initial cost. "You can install this system for a few hundred dollars," he said, "and in the four years that we've been using the system, our power bill has never been more than \$10, and that is due to the fact that the refrigerator and well pump are still on conventional power." He is currently working on a converter that will produce the 240 AC current necessary to power these two appliances.

And monetary savings are not the only advantage of Roy's system. Remember the cold, powerless nights during the snow and ice storms last winter? Well, the Holloways were warm, cozy and watching TV while everyone else was eating cold cheese sandwiches, wrapped up in blankets in the dark. Ane once set up the system requires very little maintenance—another money-saving advantage.


But what if the sun doesn't shine, you ask? He has covered that angle as well. A 150 watt bulb placed in front of the solar cells (which are portable) will charge as many as eight batteries in 24 hours.

When asked how he managed to come up with all these ideas, he simply replied, "I learn something new every day. God has given us all the materials that we need to solve our problems—we just have to figure out what to do with them. I feel that this solar system is a great opportunity for those people who want to help themselves."



. . . and his solar energy invention

Photos by Katrena McCall



Thursday, July 19, 1979

Living Today

Going To Switzerland? Take Money

My feet still ache and I gained four unwanted pounds from eating rich pastries but I enjoyed my first real vacation, abroad, last week.

Zurich, Switzerland rolls out the red carpet to American tourists who are greeted with hearty "Gritsey" (welcome) and made me feel at home on a foreign soil where we spoke neither German, French, Italian or Raeto-Romansch.

It was a different story on returning to the U.S.A. via JFK Airport in New York City after flying 11 hours in a jet and where clearing customs was a hassle.

If I had been a foreign visitor coming to America and could not speak English I would have been terrified.

It's difficult as a Southerner to overlook the rudeness you incur as a returning U.S. citizen from porters amid the hustle and bustle of other passengers herded through the airport lobbies like "cattle", to use a term that one policeman shouted as we were waiting for a promised tour guide who failed to show.

But there are always some unpleasanties when you are among 258 on a chartered flight to Europe.

Nothing went smoothly before we left the U.S., as we learned only a day before departing that our flight was returning to Raleigh-Durham Airport last Saturday night at 11 p.m. Carolyn Rutledge, of Stanley, and I drove to Raleigh, parked my car there and boarded a DC8 which had stopped at Charlotte's Douglas Municipal Airport where we could not board the special chartered flight. We arrived in Switzerland the next day (Sunday) at 2:30 p.m. Swiss time, which is approximately six hours ahead of our daylight savings time. We departed from Zurich last Saturday at 1:30 p.m. Swiss time, made an unscheduled stop in Boston for refueling, and from New York to Raleigh. By time it was 5 a.m. Swiss time and we had not slept in 21 hours. Because of customs regulations, 30 Boston passengers on the same flight could not get off the plane which was in sight of their parked automobiles. They flew on to New York and went through customs with the rest of us.

For me, Switzerland is a land of infinite variety in weather, scenery, people, language and food, and so much more interesting because of it.

A comparatively small country, it has much to offer both the casual visitor and the intending resident from sun-bathed lakes and vineyards to snow-covered mountains, from delightful little villages still off the beaten track of the tourist, to cosmopolitan cities with international attractions. It has four languages and a cuisine embodying dishes inspired by the countries on its borders, adapted to the tastes and needs of the Swiss people.

Mary Warren of Weldon, my roommate at the Zurich Hilton and I were impressed with the cleanliness of Zurich and the friendliness of the people. When we were not among the other Tar Heels on bus tours, we boarded a city bus which cost two francs (about \$1.25) for a 15 minute ride downtown where we caught the subway to the main shopping districts. We learned immediately on our arrival that the American dollar is worth 63 cents and that food would be an expensive item. For instance, Swiss beer and wine are cheaper and the favorite drink of the natives. Tea was one franc, 50 (about 90 cents) for a small glass, no ice, and coffee was much more expensive. We had already

purchased dine-arama tickets for five continental breakfasts and five dinners, which saved us a considerable amount of money. To compare some of the prices: in all the hotel rooms are an automatic Captain's Bar and drinks can be obtained by inserting a key in the bar. The cost is added to the room bill. Tomato juice, small glass, \$1.44; Pepsi Cola, small glass, \$2.16; orange juice, small glass, \$2.16. A cocktail would run about \$5 to \$8, depending on your selection. In Zurich, gasoline cost \$2.50 per gallon and the speed limit on the highways, although measured by kilometers, is 85 miles per hour. We didn't rent a car, preferred to use the bus, street car, subway, and train. We also walked.

Apparently no one but the very rich own land in Switzerland. Passing through farmland after farmland, we were told that land is sold by the square yard and in the country is approximately six dollars a square yard, in the city more expensive. Tiny mowers were being used for cutting hay and we noticed small garden "patches" which our guides told us were small garden spots rented by farmers.

If you are a cigarette smoker, going to Switzerland might help you to quit. The cost of cigarettes are exorbitant. You quickly learn where the fruit and vegetable markets are, because sandwiches and hamburgers are also very expensive. Some restaurants charge extra for bread and butter and for each cup of coffee. A typical "continental breakfast" includes hard rolls and butter, all the espresso coffee you can drink, orange juice and jelly. A European breakfast could also include cold meats, cheeses, and the traditional bread. Some members of our party, who are big breakfast eaters, ordered eggs but they didn't like the bacon, which appeared to be raw. Swiss desserts are a treat, and pastry, cheese and wine shops are scattered throughout the city of Zurich, which has a population of 400,000. It cost \$1.63 to mail a postcard from Zurich.

Ten percent of the Swiss people farm and we were given some of the history of the people by our guides, Anna and Bernhard Maeder of Trans National Tours, who are excellent. They pointed out the high piles of compost in front of the beautiful homes and

told us that when a man goes looking for a wife that he inspects very closely the tidiness of the farm and how the compost is stacked in front of the house. If untidy, this means the lady is a bad housekeeper.

Zurich is a beautiful vacation spot and traveling "on your own" would not be a problem. Trans-National of Zurich provides optional tours and English-speaking guides, as well as guides who speak other languages for most any place you would want to visit. I would recommend you stay at the International Hotel, in downtown Zurich, although the Zurich Hilton at the Airport is an excellent hotel but you have to take a bus to get to the shopping areas. Credit cards are honored in all the areas we visited and if we did not have Swiss francs, traveler's checks and American currency was accepted. Going abroad requires a passport and our passport was stamped in three countries. Our bus driver took our passports and had them stamped in Germany and a customs official came on board our Italy-bound ship. We zipped through customs at the Swiss Airport and our baggage was at the hotel by the time we arrived.

It was interesting to learn that a man is inducted in the service at age 20 for 13 weeks training and keeps his own carbine and uniform until he reaches age 50 when he takes them back for final inspection. His time in service decreases after the first two years and his last day in the Army is like Father's Day in this country.

Two unforgettable ex-

periences; On the flight from New York City to Switzerland we finished the evening meal at daylight, U.S.A. time, and saw the sunrise over Switzerland at 2:30 a.m., our time. We Americans were joined by Germans and Swiss in singing "God Bless America" on our last evening in Zurich at a Yodelfest.

Nobody takes a trip to Switzerland without viewing the monumental Swiss alps and the glacier village of Grindelwald, nestled high up in the alpine mountains, was on our itinerary as was a trip to historical Lucerne. Michelangelo never lived there but you'd never believe it after seeing the colorful paintings on the fresco-adorned houses of charming Stein am Rhein.

In the Black Forest of Germany we saw a 17th century wine press which the monks used to produce hearty red and light white wines during the Dark Ages. The trees grow so closely together in the Black Forest that daylight becomes night and enroute we visited Titisee, one of the most popular health resorts in Baden-Wuerttemberg. This part of Germany is cuckoo cloth country.

Folk dancing, yodeling, and alpine horn blowing featured the traditional Swiss Yodelfest, a farewell to Switzerland party and typical food, including Swiss Bundner Gersternsuppe (barley soup) and a fabulous country buffet, assorted Fleisch um Znnunichratte, Quiche Lorraine, six different kinds of green and mixed salads, hot roasted veal, bratwurst, roasted chicken from the

split and ice cream dessert. We rode the Lugano Express, through the mountains of Switzerland and then took a boat for a short excursion in Italy and the Swiss Riviera. Our modern, express train took us through some of the most magnificent scenery in all the world and through the Gotthard Tunnel to the heart of Europe. This famous nine mile tunnel, which took over seven years to build, is one of the great engineering marvels of the 19th century. Lugano is a resort city with subtropical climate and palm trees, a blend of Swiss and Italian cultures.

Zurich, at the geographical center of Europe, is a lakeside garden city surrounded by green hills and snow-capped peaks. The countryside is full of Swiss chalet-type homes adorned with window boxes of red geraniums. We were told that the geraniums keep insects away as there were no screens on the windows and doors.

Shopping on Zurich's Fifth Avenue, the elegant Bahnhofstrasse, is an experience. We window shopped. Going into the stores, we found that sizes in dresses and shoes are quite different. In Europe I would wear a size 40-42 in a dress, 46 in a blouse or sweater, and I gave up on shoes.

The working woman must work until age 65 and males must belong to some branch of service until age 50 in Switzerland. There is a very low crime rate and few accidents. American housewives wouldn't like television, no soap operas. The set isn't turned on until about 6 p.m. and the news

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