

June 1982

EAA CHAPTER - 690 gwinnett county, georgia NEWS - COMM

MEETINGS 2ND FRIDAY EACH MONTH AT STONE MOUNTAIN AIRPORT-8:00 P.M.

EDITOR: Rex Davis, 3416-B Water Vistas Pkwy, Lawrenceville, GA 30245
Telephone: 921-6897

John Popps, President
939-6610
Dennis Balsam, Vice-President
923-5259

OFFICERS

Joel Levine, Secretary
394-5466
Ed Booth, Treasurer
921-2907



GERALD COLLINS WITH HIS LONG EZE

(In the picture the nose wheel was removed to repair flat tire)

See Article "THE WAY IT WAS" by Gerald Collins

THE WAY IT WAS

by
Gerald Collins

Long EZ 197GC began as a light in my brain about May 1980 when I heard that a friend of mine was going to build one. What a nice way to keep from watching television at night, I thought. After studying his plans, I figured I could handle the project and mulled it over about a month before being able to commit to that large a financial and time investment. Once the decision was made, though, I couldn't wait to get the plans. On July 6, 1980, I started the EZ by making two small metal parts and starting my diary on the project. I put in 48 hours the first month making small metal parts out of scrap aluminum I had on hand. In the following months I averaged 100 hours working on the project, not counting time spent procuring parts and materials. About a year and 1200 hours later I got the first FAA inspection of all the structural members.

The designer, Burt Rutan, advertises that you too can build this exciting, cross country airplane in only 800 hours if you buy all the pre-fabricated metal parts. Even if you're a die-hard builder who wants to build all of this airplane, you can do it in 1500 hours. So they say. I questioned a Rutan Aircraft Factory representative about my seemingly slow progress, and he couldn't understand it, postulating that I must be spending a lot of time reading the plans. After all, the construction, as they constantly remind you is "Vari Eze". Twenty two months and 2300 manhours after beginning, I had myself a real Long EZ. That doesn't include approximately 300 hours of help I received from friends and other builders (not mutually exclusive sets).

It isn't totally fair to Rutan's crowd to cast aspersions on their advertisements of the amount of time required to build a Long EZ, because I did add a few things not in the plans. And I did try to do a nice job, not a quick job. For instance, I added fuel sending units and a dual fuel gauge on the panel so I wouldn't get a crick in the neck from looking at my fuel level. I put a little wood veneer (walnut burl) on the instrument panel because I thought it would look good. There are two radios because I have had a lot of trouble with radios in the past. And of course you have to have a transponder, heated pitot, and marker beacon antenna to do any IFR work. It is set up to accept a self contained glide slope unit which is only \$1,200.00 away. The flush engine-air- inlet scoop added perhaps another 100 hours. And I didn't have to have the onboard computer, but it seemed like such a neat thing to be able to keep up with fuel burned, fuel remaining, fuel flow, miles per gallon, time and fuel required to destination etc, etc., that I just couldn't resist. The back seat throttle is not in the plans, but my wife, Helen, said that if I wanted to be able to fly any when we traveled together, I'd better install one. Oh yes, I forgot to include the 80 or so hours Helen spent doing the needle point plan forms of the Long EZ which grace the seat backs. I had the upholstery sewn by professional upholsterers. The finishing/painting process is a big job and consumed at least 400 hours. The paint is Imron, chosen for its durability.

Well, once it's finished, you or someone has to fly it. I wasn't sure who that someone would be until after I had the plane at the airport for three days and had taxied it for about two hours. Those two hours told me that the engine was probably going to run alright, that it would run at full power for at least a short time, that directional control was no problem, and that pitch control was not that difficult either. Yet, there is a world of difference between taxiing and actually leaving the ground and airport. I don't mind telling you that I was scared, because I had previously had the experience of damaging my BD-4 the first day I flew it. Nonetheless, I made the decision that I would fly it the next day and called all my friends whom I thought would be interested enough to come out. Helen couldn't be there because she was out of town on her job as co-pilot on a Turbo-Commander, but most of my family and friends were there at the appointed time. After one last taxi run to be sure everything still looked alright, I pushed the throttle forward knowing I would not be backing off this time. It lifted off nicely and to my great satisfaction didn't do anything unexpected. Three trips around the patch and I was ready to put down. Setting up for the landing, I was

surprised at how much force it took to deploy the speed brake. And that it immediately came undeployed. The geometry wasn't right and it wouldn't stay out, so I was high and fast on the first approach. A low level, low speed fly-by was the natural result of this situation as I went around for another try. Coming in lower and slower, I made a faster than normal touch down and it was all over. Except the champagne and revelry. I asked Craig Gottschang if he wanted to take it around the patch, and for some reason he did. Of course he was much smoother with it than I was.

The second flight was made the next day and was much easier and more enjoyable. A week after the first flight, I've worked out a high oil temp problem, adjusted the speed brake so that it will stay deployed, and put about seven hours on it. It will fly 100 mph on 4.8 gallons per hour, reach a top speed of about 180 mph without wheel pants, and take off and land in about 1800 feet. Landings are very easy as it floats like a low wing, high aspect ratio craft and gives you plenty of time to grease it on.

Looking back on the project, I would say that it is one of the most satisfying things I've ever done, and it was fun all along the way. Many people who came by during the course of the building would say "I don't see how you have the patience to do that" or "I could never start anything that takes that long to finish". My answer to that is that building an airplane is like eating a meal or any number of other activities I could mention, in that being finished isn't where all the pleasure is. Getting there is fun too. And what if you don't start building a plane you've been dreaming of? Two or three years will still pass as quickly, and all you can say is that you've watched a bunch more television. For me it was much easier to build than not to build. And if it wasn't all EZ, it was mostly fun. I particularly enjoyed the camaraderie with other builders and the friendships I developed with them. Now I'm looking forward to lots of traveling in the EZ and sharing my expertise with other builders coming along with their EZ's.

LETTERS 'N SHOP TALK



UNAPPROVED SYNTHETIC FABRIC FINISHING PROCEDURE

*From FAA Aviation Standards Service Difficulty
Reports*

Recently, a 100% polyurethane primer and paint finishing system for dacron aircraft fabric has been developed and marketed under the trade name, "Superflite Durethane System".

Aircraft owners and repair facilities are cautioned that this alternate finishing procedure is NOT approved under Supplemental Type Certificates (STC) SA 1351WE, SA 2666WE, or SG 10WE held by Ceconite, Inc., for their Ceconite 101, 102 and 103 fabrics respectively. Further, persons purchasing synthetic dacron fabrics are also cautioned that only FAA approved Ceconite fabrics are eligible for use under the above STC's. FAA approved Ceconite fabrics have "Ceconite 101", "Ceconite 102", or "Ceconite 103" stamped on the selvage at one yard intervals. In addition, Ceconite 101 has three longitudinal marker yarns woven into the selvage for positive identification.

WHEEL REMOVAL

From Aviation Mechanics Bulletin

When removing any tire and wheel assembly from an aircraft, the valve core must be removed to release the internal air pressure. Take into consideration that there might be damaged or sheered "wheel half" tie bolts. The axle nut might be the last remaining strength-providing factor holding the wheel halves intact.

Removal of the axle nut under the circumstances described above, with air pressure remaining within the tire, could result in disaster. Remember, never remove a wheel assembly from any aircraft while it contains air pressure. Remove the valve core before removing the axle nut.

PAINT FINISHES

From Bill Chomo, EAA Aviation Foundation Maintenance Director

Do you have wormy, crawly, little dust specks on your paint finish right after you just cleaned your spray gun?

Check your polyester clothing for very fine hairs. The EAA Aviation Foundation's Paint Shop has found that polyester work clothing can exude very fine and curly fibers that seem to be able to pass through the filters we are using. Our shop has eliminated use of polyester work clothes in the paint room and is now using throw-away paper overalls. The money invested is well spent since we end up with a perfect finish.

SEPTEMBER 23-26, 1982 — ATLANTA, GEORGIA — Southeastern Aerobatic Championships sponsored by IAC Chapter #3 to be held at Bear Creek Airport. Practice and registration on the 23rd. For more information, contact Bob Shaw, Contest Chairman, 106 Appleseed Ct., Peachtree City, GA 30269. Phone: 404/487-8322.

ASK SAM

What you always wanted to know about aerobatics but didn't know who to ask, ask Sam Maxwell. Sam is a very active member in the International Aerobatic Club and will be our guest speaker at our Chapter meeting Friday June 11, 1982, at 8:00 p.m. at the Stone Mountain Airport.

Sam's credentials are too numerous to list, but to give an example as to the expertise of our guest speaker the following list has been compiled:

CONTESTS

- 1st Place - Intermediate Division - East Coast Aerobatic Championship
Fredericksburg, VA
May 15-18, 1980
- 2nd Place - Intermediate Division - Lone Star Aerobatic Championship
Dallas, TX
June 6-8, 1980
- 3rd Place - Intermediate Division - I.A.C. Championships at Fond Du Lac, WI
1980.
- 1st Place - Intermediate Division - U.S. National Aerobatic Championships
Sherman, TX
October 5-11, 1980
(Also Contest Chairman for the event)

In addition, Sam is a National Judge for I.A.C., was Chief Judge for Chapter 78, Maple Lake, MN Sportsman Contest in September 1981, and also a member of the 1981 I.A.C. Rules Committee.

This Chapter meeting will be an excellent time to learn about Aerobatic from an expert.

*Sam's wife, Sara, is Secretary for the I.A.C. National Organization.

+ 8

Enclosed with this issue of the News-Comm is a Membership Directory for Chapter 690. There is an insert in the directory which lists the new members who joined at the Gwinnett County Airshow. Please welcome these new members.

)SHKOSH EAA CONVENTION JULY 31 - AUG 7, 1982

POST SHOW

Gwinnett County Airshow May 15 & 16 this past month was another enjoyable and busy activity not only for our Chapter but for Rob Mancini and the Roman Aviation personnel.

Rob Mancini and Roman Aviation presented a very fine Airshow which had several good aerobatic exhibitions, helicopter and airplane rides available, Lear Jet fly-by, skydivers, displays and etc.

As for our Chapter activity in the airshow, we had a large EAA information display, hot "dawg" and soft drink stand, Craig Gottschang and Gerald Collins EZE's, Bill Miller's Zenith and Cricket, a Baby Great Lakes, a good engine display, a model with workable controls, instrument display, hot air balloons, a Goldwing ultralight, and of course John Popp's homebuilt and classic aircraft fly-bys.

A special thanks to Chapter member Harold Stalcup, who coordinated all of our Chapter activities.

There were many, many Chapter members and their wives who donated their time to the numerous tasks required at the airshow in order to make our presentation a success. A large thank you to each of you. As there were such a large number of volunteers, we will not try to list all of you in fear of missing someone, but all of you know who you were.

CAM-18 IS AVAILABLE

Dear Sir:

I enjoyed Chuck Larsen's article on rib stitching in the September '81 issue of *SPORT AVIATION* so much that I have taken the liberty of having a copy of it handy when we discuss the subject in our A & P cram courses. I will take issue with him on one point: Civil Air Manual #18 IS available through Commercial Aviation Service (Box 7445, Miami, Florida 33155).

Sincerely,
John H. Zimmerman
Instructor, Burnside-Ott
A & P Technician Training

FITTING AIRCRAFT TUBING

From Ben Owen, EAA Information Services

Bob Stagner, EAA 87911, of Poplar Bluff, Missouri is working on an Acro II. He found that cutting the tubing is very easy with a pair of aviation snips. He then uses a heavy duty ball bearing industrial Dremel tool with a number 488 sanding drum on it to finish the tubing end. He reports the method allows for very good fits and he rarely needs to use his pedestal grinder.