

OCTOBER 1990

EAA CHAPTER-690 NAV-COM

MEETINGS 2ND FRIDAY EACH MONTH AT STONE MOUNTAIN AIRPORT - 8:00PM

EDITOR: Henry Warner (404) 449-9775



OFFICERS

President, Frank Wilcox
978-2403

Vice President, Duane Huff
921-4423

Secretary, John Goodman
972-2405

Treasurer, Mike North
925-9552

TECHNICAL COUNSELORS
Ed Booth 921-2907
John Popp 939-6610
Frank Wilcox 978-2403

CHAPTER TOOLS AND MATERIALS
John Popp 939-6610
3508 Bowling Green Way
Doraville, GA 30340

EAA CHAPTER-690 NAV-COM

EDITOR: Henry Warner
6349 Danbury Lane

Phone: (404) 449-9775
Norcross, GA 30093



Duane K. Huff
383 Bethesda Church Road
Lawrenceville, GA 30244

PRESIDENT'S MESSAGE

Fall has finally and officially arrived in North Georgia. This, of course, means cooler temperatures, clearer air and shorter days. Working on our projects will be much more comfortable. We will expect to hear unprecedented progress from our Chapter builders. And from those who are flying, off the far away places they have visited.

Fall brings our traditional Chapter BBQ at Charlie Sego's estate. Over thirty members and their families enjoyed John Henderson's expertly prepared "ribs" on Sept. 22nd. They were the best ever John, thanks. Thanks, also, to the wives who rounded out our feast with salads, vegetables and delicious deserts. If you missed this one get ready for next year.

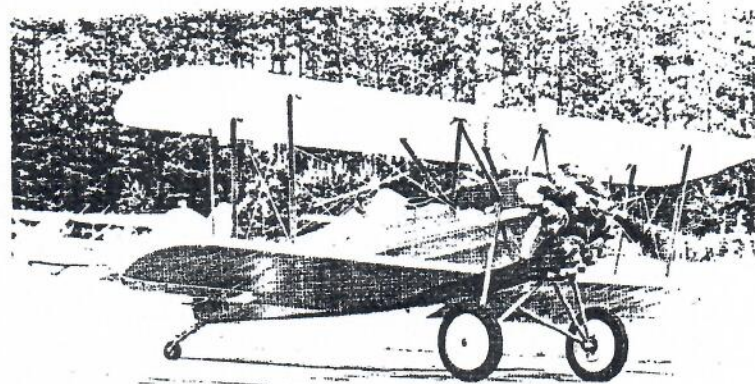
I hope that you didn't miss the September program. Bill Duncan of the FAA Flight Standards District Office (Atlanta) made an interesting presentation on owner performed preventive maintenance permitted in FAR 43.3(g). Bill pointed out that this maintenance must be recorded in the log books and signed by the owner pilot including the airman certificate number. The question and answer period included interpretation of this FAR and the process for licensing amateur built aircraft.

The 1990 Chapter Membership Directory is rolling off the press. Copies should be available to members by the

October meeting. The Chapter membership is 65. Thanks to Joel Levine for spearheading this effort. I am sure you will be pleased with this attractive and useful resource.

Bob Barton is to be congratulated for the interesting and well written first installment of his "Story of Sonerai II, N46RB". Most "engineers" have difficulty even spelling let alone composing masterpieces such as this. We are all looking forward to future issues of the NAV / COM to see how the saga turns out.

What is DUAT? How does it work? How can I use it? These and many more questions concerning this new wonder of the electronic age will be answered by John Popps at the October meeting. Hope to see all of you there.



... POW ! With smaller tips and more practice, I made up some sample welds and nearby broke my back trying to break them.

After the basic framework was assembled, I tackled the tail feathers. When an airplane can sit on its gear and the vertical tail is installed ... that is when it begins to look like an airplane. That's how it was when I built models ... and sure enough, it happened here too.

Some people wonder why it took me over eight years to finish my airplane. I guess it didn't have to. Others, when they realize the number of parts and the magnitude of the undertaking marvel that it could be finished at all. I just approached it like a mouse eating an elephant, and kept nibbling away ... pausing sometimes to watch TV, or go on trips, and to let my wallet re-inflate, but always nibbling away. Oh, anybody could build one quicker and probably spend fewer man hours too, but this was a hobby, not an obsession.

I was learning too. Take the spar box for instance. The Sonerai features a steel box bolted into the fuselage that the wings slide into and are held in place on the box where two pieces of metal met. What's this ? The 16th inch steel web on the front of the box took on the shape of a lettuce leaf when I ran a bead down its intersection with an eighth inch plate. YUK ! How will I ever get the spar tangs to slide in there? With a mixture of one part chagrin, two parts remorse, and three

parts education I heated, pounded, and finally straightened the beast.

Parts, parts, lots of parts. Controls, seats, tabs, clips, motor mounts, 'till almost all of the welding was done and it was time to drag out the wing kits and start working with a new medium - aluminum.

(Second part of Series)

CALENDAR OF EVENTS

Oct. 12 Meeting at Stone Mtn Airport.

Oct. 20 Hands on Duat - John Popps House

Nov. 9 Meeting Stone Mtn. Airport

Nov. 10 Dalonega Fly-In

Dec. 14 Christmas Party

THE REAL FACTS

EAA Technical Counselor News

In the past 50 years there have been nine collisions between general aviation and airline aircraft. In the same period, there have been thirty-seven mid-air collisions between airlines, airline-airline or military-airline, military included. The last mid air collision between a general aviation aircraft and an airline occurred on 8/31/86 at Cerrito, California between a Mexican DC-9 and a Piper aircraft.

As of 1 / 90 the current general aviation fleet totaled approximately 210,000 aircraft. Of these amateur built aircraft numbered 13,500. Transport, non-general aviation totaled 5,253.

The Story of Sonerai IIL,
N46RB
Getting Started.

Still at 2500 feet, but nearer to home base (Winder), here is the baby blue water tank at Auburn, Georgia. Looking like a Jules Verne rocket, poised to depart this earth with a touch of a match.

I start a gradual descent ... over Carl, then Winder with the airport straight ahead. (Careful pilots don't say "dead ahead" anymore... lawyers may be listening).

I cut across midfield to get a good look at the windsock. With no radio to tell me which runway to use, I'll have to pick the one the wind favors. I also keep an extra sharp lookout for other traffic ... in the air and on the runways. It occurs to me that the radios and all the talk that is supposed to make flying safer often lulls me into a sense of complacency about keeping my eyeballs peeled. "If nobody says anything on the radio (and my frequency), then that proves nobody's there ... right?" No, I feel safer now swiveling my head, than I do in radio equipped planes.

I can see that I'm not alone here. Opposite the end of the runway, chop to idle and swing down a long graceful arc at 80 knots. Roll out short final and slip off the extra altitude, then slow to 70 knots over the threshold. Close to the runway I pull the nose up 'till the landscape looks just like it does when I'm sitting still in the three

point attitude ... then hold that as we gradually slow to a perfect three point "squeaker." The airport is obviously completely deserted because you never make a landing like that when anyone is watching.

The Sonerai rumbles to a slow taxi speed and I turn off the runway. Everything is still solidly attached ... we are all in one piece.

Time was when I wasn't all that confident that it would turn out that way. Could I learn to weld? ... rivet? ... we'll see.

The plans for my Sonerai II arrived and my family hid them to present to me as a birthday present. That was March 1979. By July the first boxes of materials and parts came and I set to work building a 2 X 16 foot work bench and cutting tubing. A neighbor loaned me his oxy-acetylene outfit and I began to learn how (not) to weld. I would just get a puddle going when POW! it would pop a sparks would fly everywhere. Relight, reheat, POW! Advice comes from all sources, but none helped until the real solution was uncovered. You not only have to set the mixture for a neutral flame; and set the size of the flame for the rate of heating needed; you have to set the size of the tip to match the particular weld you are making. My tips were too large. When I cut the flow rates down for the thin walled tubing, the gasses inside the tip were not flowing fast enough to cool the tip itself. When it hot enough, the mixture ignited inside the tip

FLY BUYS

Focke-Wulfe FW 190. 1 / 2 Scale. Foam and Glass, single seat homebuilt. 75% complete, all cowlings, canopy and C-95 engine. Wood frame on gear. No logs. War Replica Plans. \$2000 OBO. Contact: Paul Atkins 973-7928 or 977-4663.

Varl Vigen project for sale. 30-35% complete. Almost all parts needed to finish except engine, canopy, and outboard wing. Over \$6000 invested. Make offer. Don Alspaugh. 981-1281.

RV-3 Kit (less engine) wings 50% complete, \$3000 Jonesboro, Georgia. Contact: 478-3321

Long Eze Project. Fuselage on gear, speed brake, center spar and roncze canard complete. Materials and hardware to finish, including canopy, contact: Jim Sower, 564-0412

Tri-Q Project for Sale. All major structures completed. Carbon spar / LS airfoil canard, all parts / plans to complete project including instruments, prop, Revcmaster 2100-D engine, Frank Wilcox at (404) 978-2403.

FLY - IN

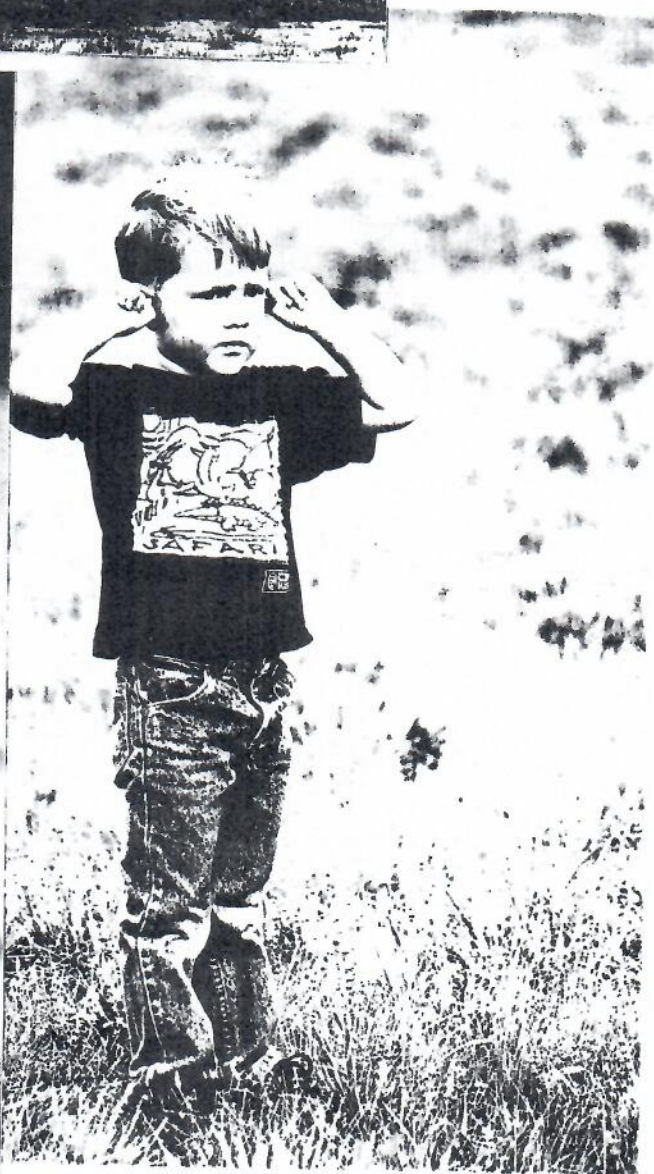
Pickens County Airport. Jasper Georgia. Saturday, October 6, 1990.

Fund raiser for Civil Air Patrol.

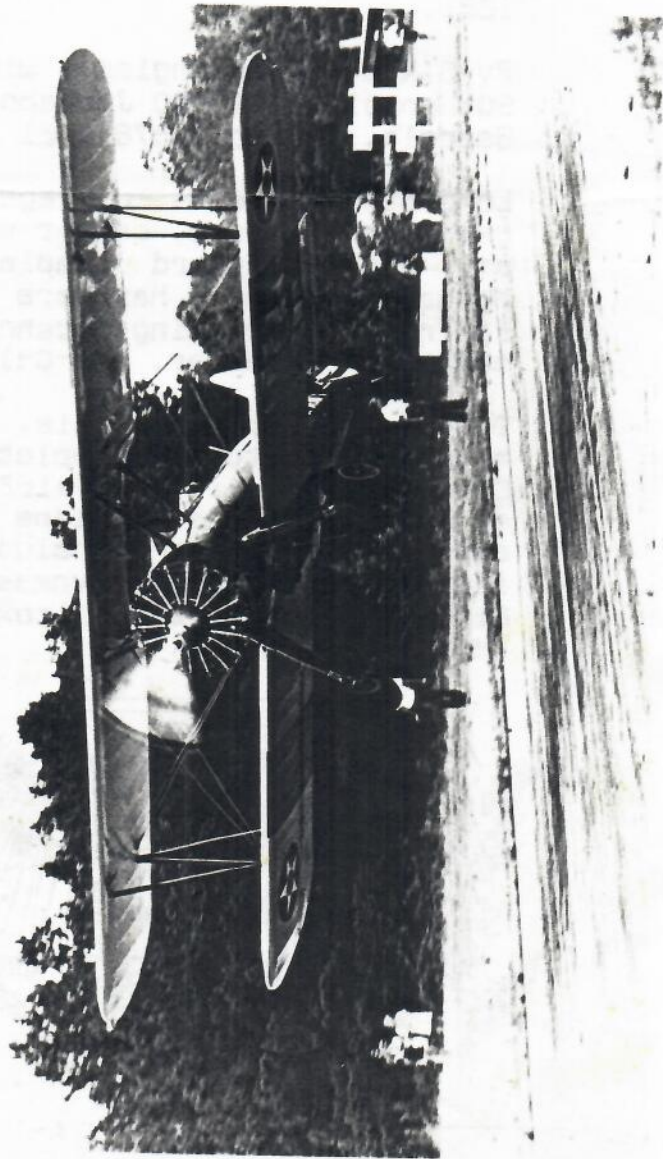
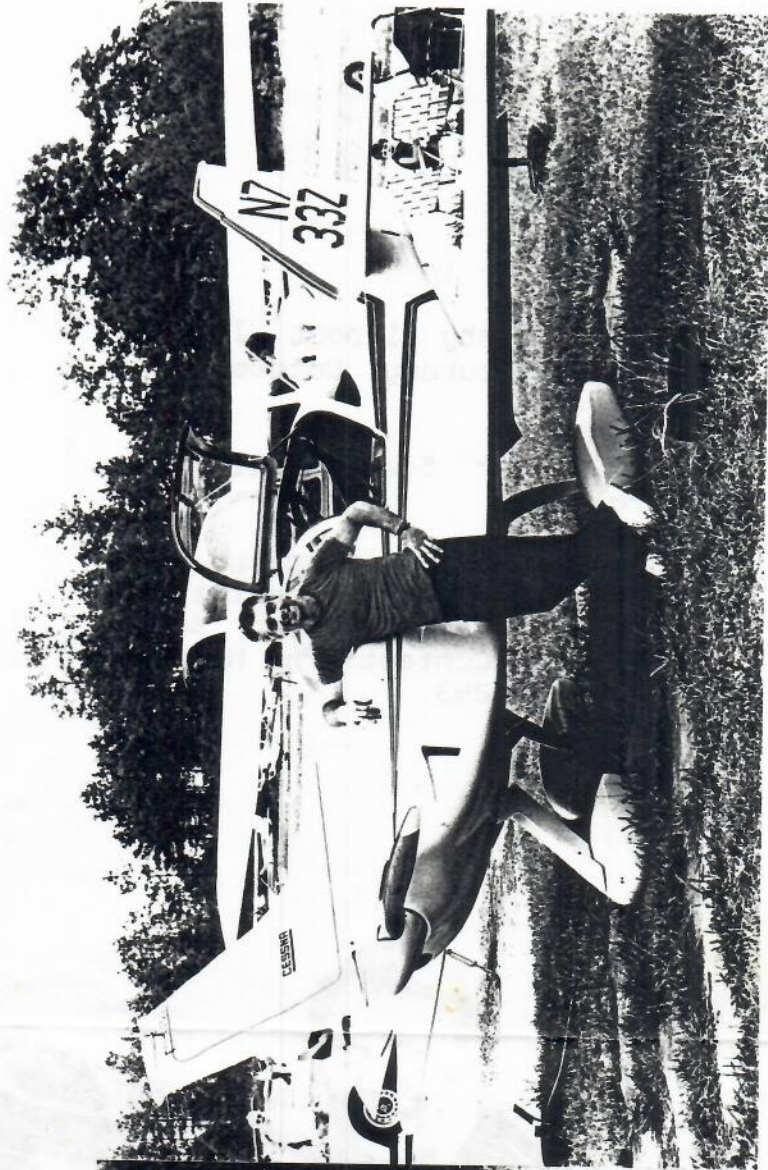
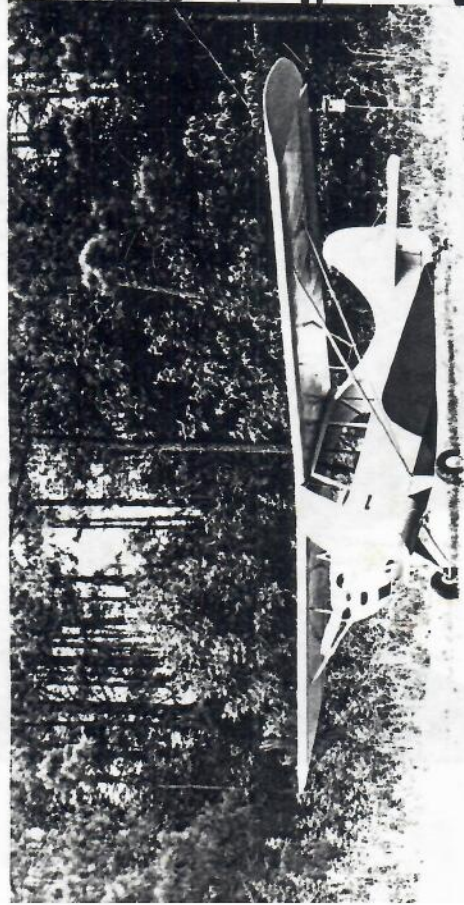
Mountain Music, Cogging, Car Show and nearby transportation provided. Camping area available. Contast: Pat Murphy (404) 692-6243.



"Instruments can fail ya, kid... but a cat always lends right side up!"

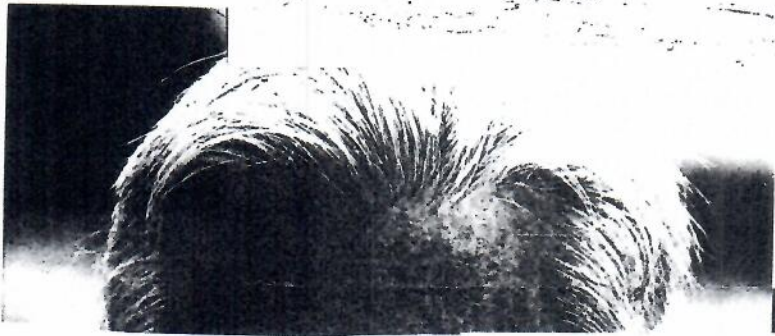






NOTICE

IT'S NOT TOO LATE TO GET IN THE 1991 CHAPTER 690 DIRECTORY. AN UPDATED ISSUE, WITH THOSE MEMBERS WHO HAVE PAID THEIR 1990 DUES BY THE OCTOBER MEETING, WILL BE AVAILABLE AT THE NOVEMBER MEETING. A PROOF COPY WILL BE AVAILABLE AT THE NEXT MEETING TO CHECK THE INFORMATION THE CHAPTER HAS ON FILE.



Half of book
page is
missing-
coupon sent in