

NOVEMBER 1990

EAA CHAPTER-690 NAV-COM

EAA
690

STONE MOUNTAIN
GEORGIA

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

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EAA CHAPTER-690 NAV-COM

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NOVEMBER
PRESIDENT'S MESSAGE

Henry Warner and his NAV-COM "staff" outdid themselves in October. That issue of the NAV-COM featured photos taken by our chapter photographer Roger Kluge of our annual Air Fair held in June. The selection was outstanding. Congratulations Henry. This effort did not go unnoticed by EAA Headquarters. I received a letter from Bob Mackey, Executive Director of EAA Chapters, complimenting Chapter 690 on its fine newsletter, our appropriate and informative meeting programs and other chapter events. No, Bob is not running for an office or asking for a financial contribution.

At the Chapter Executive Meeting held October 4, two concerns were discussed. The first is that the entrance to Stone Mountain Airport is not very attractive. Would some improvement with a minimal landscaping be a worthwhile chapter project? A committee headed by Harold Stalcup as appointed to provide recommendations. The second concern is that our monthly meeting attendance is slowly outgrowing our present meeting space. A committee headed by Bernie Jager was appointed to explore alternatives. Suggestions by all members are welcome regarding these concerns.

We mentioned last month that the new Chapter Member Directory was rolling off the press. The proof copy was circulated at the October meeting and it is outstanding. Joel Levine has done a super

job. Joel requested that members present check the info about themselves for errors. If you did not or were not present call Joel for this review. We want this information to be accurate.

Thanks to all members who helped with the Chapter booth at the Gwinnett County Air Show, October 13-14. John Goodman's "moni". Reinhart Kunt's "Der Kricket". Duane Huff's Aeronca "Chief" and Frank Flessel's Piper "Tripacer" represented EAA very well and added to the enjoyment of the spectators. Many other members planned to bring aircraft but got caught between the late morning fog both days and the early closing of the airport for the airshow. Thanks for your interest. We talked with many folks that showed an interest in EAA and in our Chapter in particular.

The mystery of DUAT, if there is any, was certainly solved by John Popp at the October meeting. John made a very professional presentation with view graphs and handouts. We could easily understand how DUAT functions, even those of us who are computer illiterate. Thanks John.

It is said that we learn from experience (and the experience of others). Our November meeting program will be just that when Mike North will discuss the HOW, WHAT, WHEN, and WHERE of his recent "off airport" landing totalling his Stinson but only scratching its occupants. We can all learn about flying (and landing from this).

Frank

SPECIAL PRICES FOR EAAer's

PSA Enterprises of Lakeland, FL. is offering FBO and Dealer prices for aircraft supplies to EAA members. This includes hardware, seal/channel, lights, strobes, windshields, switches, brake lines, etc. John Popp has a sample listing, a copy of which will be on our chapter bulletin board at Stone Mountain Airport. You may call PSA directly at 1-800-922-4491. Identify yourself as an EAA member.

ANNUAL ACHIEVEMENT AWARD

Each year, Chapter 690 recognizes one of its members for outstanding service or achievement to the chapter. Traditionally, the recipient is selected by members attending the November monthly meeting. Please be prepared to present your selection of a candidate to be honored for 1990.

NEW NAV-COM EDITOR

Due to circumstances beyond his control, Henry Warner must give up his service to Chapter 690 as editor of the NAV-COM. We are most fortunate that Jeff Boatright has volunteered to take on this important responsibility. Those are big shoes to fill, but we are confident that Jeff can do the job. Thanks Jeff. We can all help Jeff by contributing to well-written, newsworthy items/articles on time. The deadline is the 20th of the month.



Are you sure John said that the sauce was one part Nitrate Dope, one part 100LL and two bottles of Tums!

THE STORY OF SONERAI N47RB Chapter 3 - Aluminum

"Is that thing aerobatic?" I hear the same question over and over. And I give them the same answer: "It's a little more aerobatic than I am!"

While I am flying along, I keep in mind how I built these wings. There have been several hundred Sonerai's built and a handful of them have experienced structural failure.

John Monnett designed a kit for strengthening the wings, but by the time this came out, my wings were already closed up. So I contemplated the number of Sonerai's that had flown safely...and done aerobatics without the mod, and I thought about the failures that often involve overweight aircraft and high-speed entries to violent maneuvers, and decided to go on with my wings as they were.

Here we are, cruising along at 2500 feet and 100 kts. Let's do a steep turn. Sixty plus degree bank and pull back on the stick. This little thing practically meets itself coming the other way. I can

see that the airplane is responsive enough and that the control forces are light enough, that the wings can be bent by a ham-fisted pilot...especially if he thinks he has an audience.

The Soneral's main spar consists of a "C" section with reinforcing caps that are various lengths of 1/8x1-1/8 inch aluminum. The capstrips must be drilled and rivetted to the "C" section with rivets all cut to their proper length. This is one place where a good squeezer would have speeded up the process. But no hurry. I welded up a small anvil, designed to fit the dimensions of the spar and hammered away until the spars were finished.

Then I borrowed a wing jig from Mac Forbes and set it up in the basement. The jig came to Mac as part of a Soneral II project he bought. When my wings were finished, I returned the jig to Mac. Of course, that was all before he and Donna found a pretty Cessna 140 up in Knoxville upon which to bestow their time and fortune. But the happy ending of that tale is that Greg Jannokas bought Mac's Soneral project and is speeding on toward completion even as we speak.

Well, to build an aluminum wing, you have to drill, deburr, and dimple a zillion holes. Then carefully put it together with half a zillion rivets. Actually, I added a few hundred when I designed and installed reinforcement for a wing-walk on the left panel. Since I had decided to build a low wing version, I

could just imagine someone stepping onto that wing...so I strengthened the upper surface between the first two ribs with a corrugated reinforcement. And to make the corrugations, I built a small bending brake. What a great education this is! I'm learning planning, manufacturing, and now tooling. Is this a great hobby or what?

I built the right wing panel first. Surely I learned enough on that one to make building the other one a snap...right?...wrong! When I went about setting the leading edge radius in one of the 4x8 sheets of .025 aluminum skin for the left panel, I neglected to Cleko the top and bottom trailing edges together. As a result, the skin came out slightly askew. Just enough to get me to work like a Trojan getting it to fit...Another lesson learned, this time in quality control.

"Did you build it yourself?" That's another question asked by people attracted to this sporty little airplane. So with a slight swell of pride, I acknowledge that I did. Of course, I realize that N46RB doesn't hold a candle to the prize-winners I read about in Sport Aviation or see at fly-ins. The goal I set for myself was to build an airplane that: 1) was safe, and 2) I could admit, without shame, that I had built...and I guess that's about where I came down. Now Clyde Schnars, on the other hand, has a real beauty. His cream-colored jewel won the 1988 Wright Brother's Award as the best Soneral. Clyde is really a

ability to fold its wings for transport. The plans call for an ingenious mechanism in each wing panel, connected to the fuselage frame, to support the wing during folding. There simply is not enough width in my little shop door to allow the fuselage to get out with those pieces welded on. So I settle for removable wings and save several pounds by leaving the ingenious mechanisms out.

With the wings finished and the ailerons fitted, it is time to attack the canopy. I had already built the frame with its hinges and latches (if we had built this at Lockheed, it would have "utilized hinging mechanisms and featured a cockpit security and latching system"...but I'm trying to keep this simple). My next job is to install the bubble and fit the aluminum skirts which connect the bubble to the frame.

There are several ways to cut the plastic bubble and most of them don't work (I understand). The method I found (that does work) is to use a Dremel Tool with a small circular saw blade in it. Carefully, carefully cut the edges and then dress with a file. Patterns for the skirt were made from poster board and, with much trying and trimming, made to fit.

The cowling is of fiberglass and fitted to the fuselage frame with engine mounted in place. The top and bottom halves are connected with a piano hinge on each side...so that when the pins are pulled out, the top can be lifted off.

The pants are fitted by leveling the fuselage and carefully enlarging the hole in the bottom to accept the wheel. Then with many measurements, they are aligned and the holes for the screws attaching it to the gear leg and axle are located. The inside of the cut-out needs to be reinforced with aluminum plates epoxied and rivetted into place.

I have noticed how often I have used the word "carefully". Actually, it's not really necessary that you be that careful...you can just buy three or four of everything and hack away. Then just select the best one, use it, and throw the rest away.

Details, details. If I described all the little things that have to be done to build an airplane, it would take you as long to read it as it does to do it...wheels, axles, brakes, floorboards, stringers, linkages, controls, tabs, tabs, tabs, etc.

When all the welding I could think of was done, I took all the steel parts out of the yard, rented a sand blaster, and blasted away. Then, before it could rust, put two coats of epoxy primer on the clean surfaces.

Now I'm ready to start putting in bits and pieces together for the last time...and then: COVER.

Bob Barton

CALENDAR OF EVENTS

Nov. 9 Meeting Stone Mtn.
Airport

Nov. 10 Dalonega Fly-In

Dec. 14 Christmas Party

FLY BUYS

AT-50A Narco Xponder with
mods-complete with cabled tray
and Trans- Cal SSD Encoder
\$600

Voice cable; Pointer ELT
complete with mounting tray
antenna and lead. Will need
new cell. \$175

3" Weston dual CHT guage,
leads and therocouple \$100

Contact: O.V. Scott, 257-
1725, 1726

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.

Vari Viggen 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.

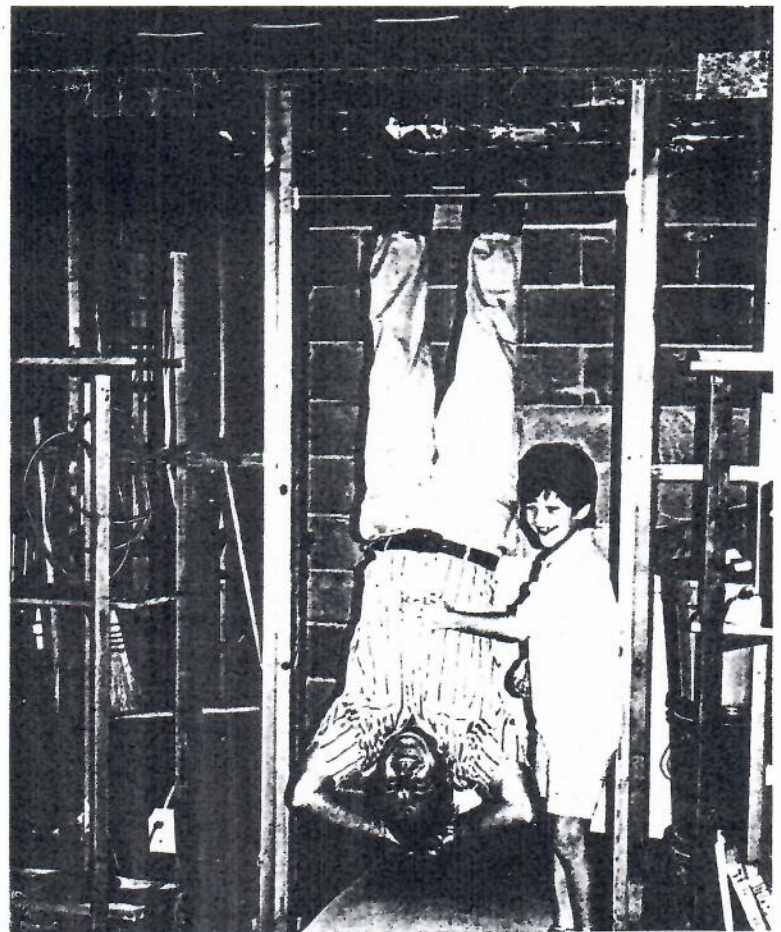
RV-3 Kit (less engine) wings
50% complete, \$3000 Jonesboro,
Georgia. Contact: 478-3321

Long Eze Project. Fuselage on
gear, speed brake, center spar
and roncze canard complete.
Materials and hardware to
fininsh, 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.

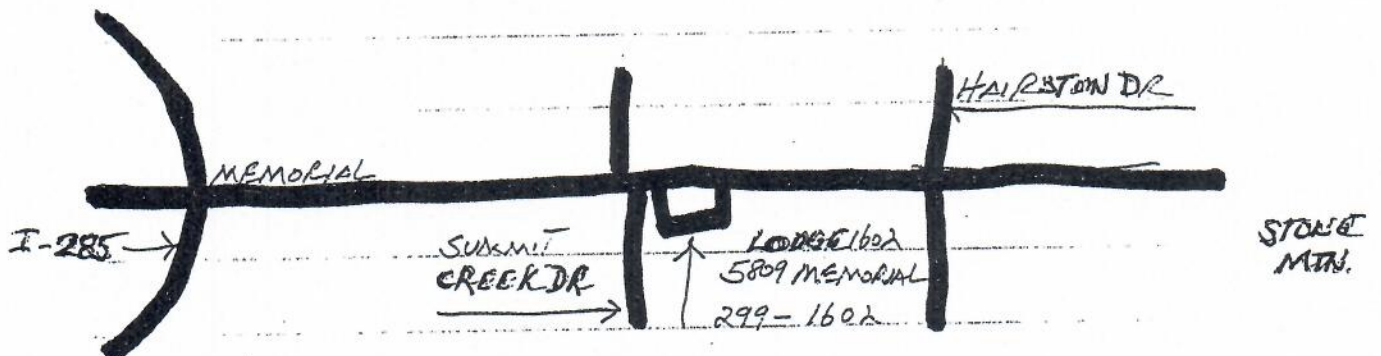


Turkey Aircraft Co.
Experimental No.1 This
aircraft, the Gobbler, single
seat, straight configuration
was not put into production
due to inherent design
imbalances of left and right
wings. The engine a "Clucker
250" ran on cranberry sauce.



So this is what Mike calls a 180
degree overhead approach.

Send the below coupon to make a reservation for you and your guests at the EAA Christmas Party to be held DECEMBER 14th and plan to come to the Decatur Elks Lodge on Memorial Drive for and evening of celebration !



SCHEDULE 7:00 - 8:00 PM ARRIVE + SOCIALIZE
 8:00 - 8:30 SPEAKER
 8:30 - 9:00 SOUP & SALAD BAR
 9:00 - ENTREE
 10:00 - DANCING AT LODGE

RESERVATION

EAA CHAPTER 690 CHRISTMAS PARTY, DECEMBER 14TH

TO: Mike North
 5252 Audubon Place
 Norcross, Georgia 30093

Please make reservations for _____ persons for the Christmas Party. I have enclosed payment of _____ (\$13.50 / person). I would like following entree(s) : _____ Prime Rib _____ Red Snapper.

Name

Guests