



PROPWASH EAA Chapter 135

BOOK 5, CHAPTER 11

NOVEMBER 2003

Cockpit Chatter

By Roger Bocox

Summer is finally over. We had our Indian Summer and that is gone. Now, just more cold weather to look forward to for the next 6 months. Kind of sad, isn't it? You would think that we would get, at least, 8-9 months of good weather a year, but sadly, this is not the case. Time to huddle up in the shop and work on all of those projects that need to be done.

Well, Bill Gast's RV is in the air. Gene's RV-9A is in the air. Why isn't mine? I am not sure I have an adequate answer right now. Interesting story—let me go on.

I thought that I was ready to have the plane inspected by the FAA, but I found things that needed to be done yet. I had Bill Gast look over the plane, and he found more things. I corrected all of them, and thought I was done-- nothing major, just little things that might cause the FAA to make a comment about them. Then, I contacted the FAA and took my paperwork over. Everything looked OK, and I was told that I would be contacted in 10 days to set up an appointment. Well, that came and went, and I got busy with other things. After about 20 days, I finally called FSDO and found out that through my moving, my Tri-ennia (sp) was out of date. The address on my registration didn't match the paperwork on my Airworthiness application. No big problem I was told. Just fax Oklahoma City with the new information, and they will get you out a new registration. Ray at FSDO thought that we could still get the inspection done before the end of October. I thought, "GREAT". I would still, maybe, have some decent weather to get the first flights in before winter hits us. (Just a guess, since we never really know when winter will actually start, right?) I shot a fax off to OKY city, and waited a few days. Just to be on the safe side, I thought that I would call the FAA down there to make sure that they really did get the fax. They said "Yes, we have all of your new data here in the computer." I asked, "Ok, then when might I expect to see the updated registration?"

To my surprise, I was told that their normal time for this was 6-8 weeks!!! I queried back, "You mean that you have all of the info in the computer and it still takes 6-8 weeks for the

computer to print out the registration and mail it?" They answered, "Yes, we don't understand it either, but that is the way it is." **Your tax dollars at work again. Maybe we should all pitch in and buy the FAA in Oky city a new Gateway computer with a printer. Seems like the one they have now doesn't work very well.**

I called Ray at FSDO in Ankeny and told him what I was told. He certainly was surprised. So, I may get the plane in the air this year, maybe not. This gives me time to do other things on the plane. I took it out, without a cowl or access covers on it to do some taxi testing. Everything worked as planned, and everything was uneventful. Run down the runway, check the nose wheel steering, brakes, elevator sensitivity, rudder reaction, ailerons; get it light on the nose wheel. Keep it on the ground! John Barcus, the airport manager at Osceola called me on the radio and told me that he thought he saw some air under my tires. I told him that it must have seen a mirage, since I was only doing taxi testing. He was mistaken. I did find a few things that needed adjustment, etc. I also had time to swing the compass, and have John Barcus go over the plane one more time. It is amazing the little things that a new pair of eyes can find? Another squawk sheet to deal with..... Oh well, better now than later. Most of what John found were little things. Better placard this better. Maybe one more thread on that nut. How about tying up that wire a little better. Things like that.

I guess the moral of the story is, the more you look the more you will find. I did realize one thing from all of this, though. My RV kit is so old that, evidently, not all of the parts details were worked out at that time. When I first started putting the kit together, I just put the parts in in the order that was on the drawings. It appears as if in quite a few places, a size longer bolt should have been called out. Over the 11 years working on this plane, I have learned a lot. I just never went back and revisited every old assembly that was put together years ago. NOW I KNOW!!

See you at the meeting.

Roger



The Leader In Recreational Aviation

PROPWASH

NEW EAA SEMINAR—A MUST for anyone who wants to purchase (or build) a plane!!



Seminar will be conducted by Pete James and Brant Hollensbe well known chapter members, on “The Ins and Outs of Convincing your Wife you MUST get an airplane.” Plan on attending this seminar and learning from the experts the secrets on the art of convincing. Brant has just purchased the Cessna 182 to the left here, and Pete has ordered and is about to receive kit #100 for an RV10. Date for seminar to be announced! Because of the sensitive nature of the subject, space limited to males only. (See Brant’s recount of the purchase of this plane in another section of this newsletter)

How many have we completed???

We are looking for everyone who has finished their project and got it in the air, in the last 5 years. **IF YOU HAVE A COMPLETED PROJECT SINCE July 1998**, please e-mail newsletter editor at chapter35@aol.com and let me know what project you completed and when it was completed. If you can e-mail a picture, please do so as well. I will publish a list and pictures in upcoming newsletter.

Look who finished his RV9A!!

(no, it wasn't Roger!!)

Completed on October 2, 2003, after only approximately 3 years and 2300 hours!!!
Congratulations Gene!!!



Chapter 135 2003 Christmas Party

Join us on Sunday, December 14, 2003 for our annual Christmas Party and Chinese Gift Exchange. (Bring a wrapped gift and designate whether male or female. \$20 limit) at Willow Creek Country Club. Starts 5:00 pm. If you've never participated in the Chinese Gift Exchange, you're gonna love it!! Please cut this form out and return to Donna Bocox with your dinner choices. Forms must be returned no later than December 5, 2003.

Name: _____ Phone No: _____

My dinner choices are : Chicken Cordon Bleu Baked Pork Tenderloin

Cost is:\$17.00/dinner Please make checks payable to EAA Chapter 135.
Payment for meal must accompany this form.

Chapter 135 Meeting October 11, 2003

Meeting was opened by Vice President, Paul Steingrabe at 7:00 pm. First noted was Brant Hollensbes new purchase, Cessna 182, which he had downstairs in the hangar. Paul also stated that Jim Delavue had just received his CFI rating. It was announced that elections will be held at the November meeting. Those up for election are: Wes Olson, Jack Arthur, Mike Abrahams and Rob Miller. All 4 have agreed to another term. No other volunteers spoke up. Mike Lossner brought his new wife Mary. Hopefully we didn't scare her off! Brant Hollensbe reported \$6500+ in the treasury. Under new business, Jack talked about the upcoming Ercoupe Convention in Knoxville June 17-20 and the need for volunteers to head up areas of need to pull off the event. More to follow on the Convention. He also mentioned that it might be a great idea for the chapter to host a "Garage Sale" in the spring, where each member could donate items to the event, and the chapter would make the profits from it. I know we all have "stuff" in our garages, and there should be no problem getting enough together for a Huge Garage Sale. The idea appealed to most everyone at the meeting. At the last board meeting, it was decided to recruit a member from the chapter meeting to set up a committee on how to set up a new corporation to handle our chapter scales. Dave Kalwishky volunteered to be the recruit. Jack also explained to the chapter members that when we locate a permanent location, it will require funds each month to maintain and a discussion followed on what possible ways we can meet the expenses. The top two currently were the garage sale, and also the vinyl machine that was purchased by 10 members to help generate a profit to the chapter. The members had a tour of Brants Cessna plane in the hangar, before project reports. Members present had lots of progress to report on their projects. It's great to see that we are getting projects *completed and in the air*. Meeting was adjourned at 9:15 pm.



YOUNG EAGLES UPDATE

Only 9500 YE's to go!! The month of November is filling up fast!! We've got Perry on the 15th at 10am. There will be 30 kids and some siblings and some parents. And no boy scouts (BS)! They may look like scouts to the untrained eye, but we know better. This is a repeat performance from 2 years ago. They are still talking about the flights, so this program may be working. Or we let Mike A fly too many of them. Either way, we're going back. We can only hope the lady that thought DRIVING an Aircoupe was better than driving a tow truck will be there again! Right Jack? I'd say bring your picnic basket and we can enjoy the airport atmosphere at lunchtime, or huddle in the office trying to stay warm. On the 22nd we go to Ankeny for 10 non-scouts at 9 am. Again at Ankeny on the 29th for 15 kids at 9 am. I will try to work a Knoxville event in on the 1st or 8th, non BS. This can be adjusted to handle as many pilots as we have, they have 50 kids on standby. As always, let me know if you can make these, we need lots on the 15th, so drag those experimentals out of the hangar and let's fly!

Thanks for your continued support! For those of you that saw the blurb in the Des Moines Register soliciting kids for the YE program, with a name and phone number of someone supposedly in our chapter, we've got that handled, and we will no doubt get a lot of additional kids interested in aviation, to fly.

—Alan Core, YE Coordinator

CHAPTER LOCATION UPDATE

While we continue our search for a permanent location, we need everyone to keep in mind that having a permanent location will be costing us each month for upkeep. Last September you all received a survey from where you voted on these locations to the left, and also to see if you were interested in making a one time tax deductible donation to the chapter. We had several respond that did. I once again put this out there to each member. **Consider making a one time donation to the chapter for the chapter location project. It's a great tax deduction, and you're helping the chapter at the same time. Please contact Donna Bocox (chapter135@aol.com) to arrange for the donation.**

Once we have made a decision on what location will become our chapter home, we will be aggressively seeking donations from members. **Please remember, this new home is a benefit for ALL MEMBERS. Together we will all benefit from this project.**

What's Going On

November 8, 2003 — Chapter 135 Monthly meeting. Board Elections. 7:00 pm at Exec I, Ankeny Airport.

November 15, 2003 — Flying YE in Perry. 10 AM

November 22, 2003 — Flying YE in Ankeny 9AM

November 24, 2003 — Chapter 135 Board Meeting 7:00 pm. Contact a board member for location.

November 29, 2003 — YE in Ankeny-9 AM

December 14, 2003 — Chapter 135 Christmas Party. Starts 5:00 pm. BE SURE TO SIGN UP FOR WHAT YOU WANT TO EAT!! Willow Creek Country Club. Bring a gift for the "Chinese Gift Exchange"

June 17-20, 2003 — National Ercoupe Convention, Knoxville Airport. Jack Arthur Coordinator.

[2004 EAA Calendars on sale beginning December 1, 2003.](#)
[Order from Brant Hollensbe:bhollensbe@mchsi.com](mailto:bhollensbe@mchsi.com)

ATTN: Wives/Girlfriends of Chapter 135 Members
Chapter 135 Garage Sale
 (coming soon to a garage near you!)

Ladies, you know all that "stuff" they (the men) accumulate that we would love to get rid of? Well, now's your chance. As a fund raising event, Chapter 135 will host a Garage Sale in the Spring of 2004. Location to be determined later, however we need all of you to be planning on what you can donate to the sale. WE WILL TAKE ANYTHING THAT YOU FEEL WE CAN SELL. THIS IS NOT JUST LIMITED TO AIRCRAFT "STUFF". So, when you come across items in your basement, garage, attic, or when you're just cleaning out, and have stuff you would maybe donate to Goodwill, etc. KEEP IT. You could donate it to the sale, and help the chapter raise money. Remember, as a non profit organization, we can give you a tax deductible donation slip. More details to follow, but for now, ladies you need to start socking away all that stuff you want them to get rid of. On the weekends when they are flying etc. just start putting aside these items. Trust me, they won't miss them! More details to follow.

Chapter Board Elections
November 8, 2003

We will hold our annual board elections at the next regular meeting, November 8, 2003. The following persons are up for re-election.

- Jack Arthur
- Rob Miller
- Mike Abrahams
- Wes Olson

Please be sure to attend the November meeting so you have a part in the election of board members. Dues must be current in order to place your vote.

National Ercoupe Convention Update

Don't forget to mark your calendars for the Ercoupe Convention in Knoxville **June 17-20, 2004**. We will be having a "**Fly Market**" at the event. Anyone interested in selling aircraft parts etc is asked to bring the parts down to the Fly Market area at the convention. There will be a nominal 10% charge, that would go to the Ercoupe Organization, for anything that you sell. **Great way for you guys to make some \$\$ on those parts you have laying around.**

Jack Arthur is the event coordinator. Anyone that can donate time during the 4 day event is asked to contact Jack. E-mail: sky3044@aol.com.

ONE ROAD TO AIRPLANE OWNERSHIP

by Brant Hollensbe

Yes, I was serious about owning an airplane. I had the money all saved up. My wife, Ronda, had given her blessing with only one condition; she wanted the right seat to be comfortable when we flew. I wanted a 4-place airplane that's in great shape with IFR for future training goals. My short list of choices included the Cherokee 160/180/235 series, the Beech Musketeer/Sundowner, and perhaps the Cessna 182.

I found a promising 1963 Cherokee 160 with 1950 hours in Vermont. It had a remanufactured engine with 1600hours, plus a recent top overhaul by Penn Yan and a pair of 9-year-old ICS digital radios with dual glide slopes. The 9-year-old paint job still looked pristine. The owner said the airplane was a low time airplane that had occasionally set idle for 2 or 3 years at a time. About 10 years ago it was gone through and brought back to great condition. I had the owner fax me copies of the logs for me to read. And I ordered a title and lien search from AOPA. I thought I had a winner! A deal was struck. I bought airline tickets to Vermont, and planned to fly the airplane back.

Thanks to Jack A., I found a great A&P located 80 miles from the Cherokee's home airport. An eager young CFI flew the plane to my mechanic for a pre-buy inspection. Later that day, the mechanic informed me that there were 7 critical items that made the aircraft unairworthy, 10 major items, and 6 minor items. To say the least, I did not buy the airplane.

The following Monday, I recounted my story at the EAA board meeting. The guys begin telling me about the various airplanes for sale in the local area. I took notice of Jim D. Cherokee 180 and a 1965 Cessna 182 at Exec 1. I called Jim and Exec 1 to arrange a time to see them. Exec 1's Cessna 182 was way out of my price range and I told them so. A day later, they emailed me saying they could go as low as my highest number in my price range. Hmmm a Cessna 182 in my price range. Very tempting, but a 182 has considerable more maintenance expense and that thirsty engine drinks 13 or 14 gallons an hour. On the plus side, the airplane seemed in great mechanical shape. The exterior looks great too. It has 900 hours to TBO (time between overhauls) and is IFR with a pair of King 170B radios, and old ADF (aren't they all).

My wife took a demo ride in a Piper Warrior and the Cessna 182 Skylane. She loved the 182s larger interior and 2 doors and the heavier payload and faster speed. Bill G. was kind enough to look her over, fly her for me, and pronounce her well-maintained and well-mannered. I had the lien and title search done and noted that there was a lien for a loan by the last owner. I made the lien removal part of the purchase agreement. The deal was made with Exec 1 supplying a CFI for me to get a High Performance endorsement plus they will do an owner assisted annual inspection. I want to thank Rob Miller for help with the annual, he taught me a lot.

AIRCRAFT WIRING

By Roger Bocox (continuation from August 2003 Newsletter)

Last time we discussed wattage and amperage. Let's look at how we size the wiring to run the various appliances. *Make a schematic of your wiring, or, at least, make a very good and detailed wiring list.* What happens is that you seem to know everything about the wiring as you are wiring the plane. Later, if there is a modification that you want to do, or need to fix something, you will never remember where what wire went where or what it was for. For this reason, I suggest, at a minimum, that a very good wiring chart be made. Give each wire a number. Start at #1 and keep going. List the size of the wire used, where it goes to on one end, where it goes to on the other end and its function. For example:

WIRE NO.	WIRE SIZE	FUNCTION	FROM	TO
21	16 GA	POWER TO LANDING LIGHT	LANDING LIGHT SWITCH	LANDING LIGHT
22	20 GA	SWITCHED POWER TO MASTER SOLE- NOID	MASTER SWITCH	MASTER SOLE- NOID CONTROL
23	18 GA	SWITCHED POWER TO LEFT WINGTIP LIGHT	LIGHT SWITCH	LEFT (RED) WINGTIP LIGHT

Table 1.

Start off with a blank table and fill it in as you figure out your wiring. If you have a computer, I suggest that you put this all in a document with multiple pages. When you finish handwriting in a page full of wire numbers and data, go into the house and put it into the computer. Then you can print it out and have a nice and legible wiring chart for your airplane.

Make a listing of all of the electrical equipment to be installed in the airplane and calculate the "AMPS" required to operate the piece of equipment. Just as above, list each wingtip light, landing light, radio, solenoid, starter, etc.

EQUIPMENT	AMPERAGE	WIRE GAUGE	COMMENTS
LANDING LT.	8.33	14	
LEFT WINGTIP LIGHT	1.25	18	Use larger gauge due to longer run and mechanical needs.

Table 2

The larger the wire gauge number, the smaller the wire—carries less current. I could never figure out why this is, but that's the way it is. A 20 gauge wire will carry a lot less current than a 14 gauge wire. Below is listed a table of wire gauges and some comments as to their usage. What I have done here is design a wiring table that takes the guesswork out of the tables in 43-13. The table is on the very safe side, and if you calculate the Amps required and use the table, you will never go wrong. This table has been developed by me over the last 25 years or so of wiring up all sorts of equipment. It has never failed me yet. If you want to go through the trouble, compare this table to the graph in figure 11.2. in the AC 43-13. You will see that this is a very conservative chart, and that is what we need—**SAFETY IN OUR WIRING!**

WIRE GAUGE	AMPERAGE RANGE TO USE WIRE	SOME COMMON USES AND/OR COMMENTS
24	LESS THAN 1 AMP	INSTRUMENTS
22	UP TO 2 AMPS	RADIO AND PANEL LIGHTS
20	2-3 AMPS	ASST. SMALL APPLIANCES
18	3-5 AMPS	SOME RADIOS- WINGTIP LIGHTS
16	5-10 AMPS	SOME RADIOS
14	10-15 AMPS	LANDING LIGHT/ PITOT HEATER
12	15-20 AMPS	VARIES
10	20-30 AMPS	VARIES/ ALTERNATOR
8	30-40 AMPS	VARIES/ALTERNATOR
6	40-60 AMPS	VARIES
4	60-80 AMPS	BATTERY CABLE- SMALL AIRCRAFT
2	60-100 AMPS	BATTERY CABLE- LARGER AIRCRAFT

Table 3

PROP WASH



Chapter 135 Officers and Board Members

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