



Illinois Valley Beacon

June 2008

Chapter 563 Chartered in 1976

Volume 15 Issue 6

The first breakfast will be held on the **First Saturday, June 7th**, in the EAA Hangar from 8:00 to 10:00.

The regular meeting will be held on the **Second Thursday, June 12th**, in the EAA Hangar starting at 7:00.

The info on the speaker will be forth coming by email.

The second breakfast will be held on the **Third Saturday, 21st**, in the EAA Hangar from 8:00 to 10:00.

The Directors meeting will be held on the **Third Thursday, 19th**, in the EAA Hangar starting at 7:00. **All members are welcome to attend.**

Secretary's Report

BOARD MINUTES – 15 May 08

Vice President Barry Logan called the meeting to order at 7 pm in the chapter hangar.

Minutes of the April Board meeting were approved as distributed. The secretary reported that our e-filed financial report has been accepted by the IRS.

As the treasurer was absent, there was no **Financial report** for April, but we believe that a nice donation to the chapter had been received from Phil Jones.

Membership Chair Morrie Caudill noted that we now have 45 2008 paid members.

Our **Program** Chair, Chris Tate, is working on a speaker for June, and he received several suggestions to explore.

Under **Properties & Safety**, the long-awaited projector is in hand. The emergency exit for the hangar is about complete, except for a

post outside to keep it from being blocked.

Barry Logan is extended a big thanks for getting this done, and also for donating the english wheel. To complete the utility of this tool, the Board authorized purchase of a shotbag and a shrinker.

Special Events Chair Sam Sisk reminded us of our first Hangar Cookout on Friday evening, May 23, and also of the Performance Challenge this coming Saturday. There was general board support for holding more challenges this summer.

Youth Outreach Chair, Bill Engel, noted that the business cards we distributed at the Prairie Air Show were getting some results. We will set up Young Eagle appointments for Saturday mornings during the summer.

Under **NEW BUSINESS**, several items were briefly discussed, including gate passes for all members, but no action was taken.

Respectfully Submitted, Bill Engel, Secretary

MEETING MINUTES –08 May 2008

President Al Phipps called the meeting to order at 7 pm in the chapter hangar. We had a very good turnout. Minutes of the April meeting were approved as printed in the Beacon.

Young Eagles Coordinator Bill Engel thanked those who volunteered at Prairie Air Show. With cooperation from the Airport Authority, ATC, and the show Executive Committee, we were well prepared to fly a lot of kids. Unfortunately, low ceilings and poor visibility shut us out both mornings. We did get responses to the cards we distributed, so we will fly those kids at Mt Hawley on Saturday mornings this summer.

Special Events Chair Sam Sisk reminded us of the Performance Challenge rescheduled for May 17 because of weather, and of our first (of more?) Hangar Cookout on Friday evening, May 23.

President Al passed around a sheet for volunteers to provide refreshments at meetings. There are still openings, so contact Al for a slot.

Program Chair Chris Tate introduced our speaker for the evening, Dave McCurdy, a manager in the PIA control tower. Dave has been at Peoria since 1987, and unlike quite a few controllers, has real

GA flying experience (COM-SMEL license, and helicopter time too). He noted that there is a growing shortage of controllers, and invited any person under 30 looking for an interesting career to apply. Simply go to the FAA website and fill out an application. Dave gave us a behind-the-scenes view of local ATC operations and addressed many questions posed by the attentive audience.

Dave also has had extensive experience with ATC at AirVenture in Oshkosh. He is responsible for setting up the procedures and supervising the teams of controllers at the World's Busiest (for one week) Airport. Again, Dave answered a lot of questions for us, and received our warm applause.

We finished the evening with cookies from Al, and coffee.

Respectfully Submitted, Bill Engel, Secretary

AC 43-16A April 2008 Page 6 CESSNA Cessna: 150/152; Cracked Aft Fin Attach Fittings; ATA 5530

(The following safety article is published as received from the Wichita Aircraft Certification Office. Contact information can be found below the attached mechanical drawing.)

“The FAA has received reports of cracks on the two vertical tail attach fittings on Cessna 150/152 airplanes. The aft fin attach fitting is part number (p/n) 0431009. There are three dash numbers: -1, -2, and -3. Most of the 41 reports found in the FAA Service Difficulty Report (SDR) database have been the -3 part. The SDR's are for cracked, broken or corroded attach fittings. A statistical analysis of the SDR data indicates that the problem was getting worse from 1976 through 1991. Since 1992, these analyses indicate improvement, with SDR's reported less frequently, due to the awareness of maintenance technicians to this problem. However, the FAA wants to keep the technicians, owners and operators aware of this problem because of the way these airplanes are used. That is, the Cessna 150/152 airplanes are used for training, aerobatics and spins. These uses put additional air loads on the vertical tail surface. So, a failure of this attach fitting could be catastrophic. Past failures have occurred in the transition from the vertical straps to the lower plate portion of the fitting. Cracks tend to form in the outboard portion of the fitting, with the outboard strap failing before the inboard strap.”

(For more information, contact Aerospace Engineer Gary Parks, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, Kansas, 67209-1985. Phone 316-946-4123.)

Don't Forget

Coffee and conversation every Thursday morning at the Chapter Hangar.

EAA CHAPTER 563 - Membership Application for year 2008

NOTE - To be a chapter member you must hold a corresponding membership in EAA.
Phone 1.800.564.6322, with credit card handy, or they can tell you of other options.

Blanks with an asterisk must be filled in. Other information is optional. We do not disclose member information except for the basics required by EAA, and as may be required by law.

For NEW members only - **At your option**, we will prorate dues for remainder of year. See Treasurer or Secretary.

Regular Membership (individual over age 18) **\$25 per calendar year:**

NAME * _____ Spouse name _____
ADDRESS * _____
EAA Membership Number * _____ expiration date * _____
Home phone * _____ Work phone _____ Cellular phone _____
E-mail _____ (please provide this if you have one - it will save Chapter funds!)

Family Membership (spouse and/or children at home wishing to be included) **\$30 per calendar year:**

Please indicate each name as **Hus, Wife, Son, Dau** : EAA Family Membership Expiration Date * _____
NAME * _____ EAA Family Membership Number * _____
NAME * _____ EAA Family Membership Number * _____
NAME * _____ EAA Family Membership Number * _____
NAME * _____ EAA Family Membership Number * _____
ADDRESS * _____
Home phone * _____ Work phone _____
Cellular phone(s) _____
E-mail(s) _____ (this info saves Chapter funds!)

Optional information that can help us serve the chapter better:

Approx. year you : first joined EAA _____ first joined Chapter 563 _____ had first plane ride _____
Other aviation org. memberships _____
Aviation-related licenses and ratings: _____
Mil. av. experience _____
Professional av. experience _____
Aircraft owned (N) now (P) past _____
Aircraft Construction (C) or Restoration (R) projects (F) Finished, (P) in Process, (T) Tabled, (D) Disposed of.
Future projects or interests _____
Recreational or occupational skills you could share _____
Other personal data you think useful _____
Any notable acquaintances? Ideas for programs? _____
May we call on you for help with a chapter event or project? _____

Please return this form with check payable to **EAA Chapter 563**

To: Morrie Caudill, 5320 N. Sherbrook Ln., Peoria, IL, 61614

In Over My Head

My Airplane-Building Adventure

By Philip Jones

Prologue:

As soon as I finished installing my nav-comm radio, I turned it on to bask in the satisfaction of a job well done. To my dismay the message "comm failure" appeared on the screen. At the end of a fruitless day of calling various people for help, I was on the phone with a local avionics expert said to be friendly to amateur builders. During our conversation, he asked me something about my localizer. I asked, "What's a localizer?" To which he responded, "You don't know what a localizer is? Sounds like you're in over your head."

"Exactly!" I thought; "That just about sums up the entire project."

Most of the things I have read about building a plane concentrate on either construction techniques or the kind of equipment to put in the plane. My aim is to give a hint of what goes on during those hundreds of hours of construction.

Just what can an ordinary bloke with no airplane construction background or particular knowledge of engines and avionics expect if he (or she) is foolhardy enough to undertake such an endeavor?

If I just had someone to discuss it with ...

Most of my time was spent trying to puzzle out



what I was supposed to do from the plans and accompanying CD. Often I only really understood a sub-unit after I had put it together. Usually, if I had gotten it

wrong, I was able to drill out the rivets and rectify the mistake, but I have a pile of mutilated aluminum that bears witness to a fair number of costly errors.

What can they mean?

My most expensive mistake occurred while I was working on the left wing. The right wing went well enough and my careful approach seemed to be paying off, although it had taken me a little over a hundred hours to complete it. In order to prevent an error as I prepared to cut the tip angle on the channel that runs along the back edge of the left wing, I kept a close eye on the completed right wing -- too close an eye. As soon as I closed my hand for the cut, I knew I had made a mistake. I had cut the angle in the same direction as the right

wing. The likelihood of finding someone who had made the same mistake in the opposite direction so we could trade seemed remote. There was nothing for it but to call the factory and confess.



The new part was only about \$150 but, because it was twelve feet long, it had to be delivered by motor freight. So began my first but not, unfortunately, last encounter with the world of

motor freight. I had no inkling that it was a world of bargaining that would put a Middle Eastern rug merchant to shame or that I should keep a tight grip on my wallet when I entered into it. Being a novice, I forked over the \$300 demanded of me by the trucking people for bringing the twelve-foot box the 250 miles to their terminal. There would be another \$50 fee if they delivered it to my house. And, no, there was no one available to help me load it; furthermore, if I did not move my vehicle away from the loading dock immediately, it would be blocked in for the rest of the day by arriving trucks.

The Eternal Part and Tool Search

Next to attempting to understand what I was doing, the greatest amount of unproductive time was spent searching for parts and tools. I realized from the beginning that good organization was going to be the key factor in such a daunting task -- quite a challenge to a person whose concept of good order consists of keeping the piles of papers on his desk in groups corresponding to their order of importance and/or urgency. (Thank goodness Toby, our cat, does not come to my office or the piles would soon be mixed and chaos would reign.)

My resolution to be super-organized about arranging tools and kit-parts, however, proved to be an exercise in self-delusion. Reality accosted me soon after beginning the project. With an entire airplane in pieces -- many of them quite small -- it is difficult to imagine how I could have arranged them efficiently, unless I had a warehouse where I could spread everything out in order on the floor. With our spare bedroom and the end of our garage as my warehouse, I could only lay parts out in a very rough macro-order. Thus, I had to go wading through almost the entire mess every time a part was called for. On several occasions, I phoned the factory to find the rough location of a part based on the part numbers that might have been packed near it. Only twice did I actually demand a part I was sure had been left out of the kit. In both cases, I eventually found the missing part.

A scheme I toyed with was to mark the various groups of parts with scents. I could give Toby a sample smell of what I was looking for and he could smell it out for me. I gave up on the idea, as it seemed unlikely that he would take time off from his own cat-business and hang around to help me.

A Nomadic Workshop

I certainly could have done better organizing my tools, but I somehow seemed incapable of accomplishing it. Of course, I can claim that the disorganization was due to the several moves I had to make. I spent the longest stretch (eight months) in my family room. The married reader will here express astonishment that my wife was willing to tolerate airplane construction in the family room, but it worked out very well. I was home with her and I

could work in comfort at odd moments during the day and in the evenings. I put together two pieces of three-quarter inch plywood and leveled them to give myself a four by sixteen-foot workbench that was more than adequate. The main difficulty in maintaining domestic tranquility was the abundance of aluminum filings that resulted from drilling holes -- the equivalent of sawdust in wood-working. Toby and I tracked it throughout the house. Actually, I am not sure how much he contributed to the problem, but he made a convenient scapegoat, since I claimed to be removing my shoes and taking every other precaution to prevent the spread of aluminum dust.

After the wings, flaps, ailerons, and horizontal stabilizer were finished, and the fuselage was assembled with clecoes but not riveted, I had done all I could do in the family room. Realizing that I could not get the fuselage through my patio door after it was riveted, I did not make the classic boat-building-in-the-basement mistake. Fortunately warm weather had come, so I was able to reassemble the fuselage in my garage and rivet it there. When the time came to attach the wings, I had to move to my hangar and, when cold weather set in again, Marty Martin and my friends at the EAA allowed me to move into the heated hangar to complete the project. So, I worked in four different locations and strung tools out along the way like Hansel's breadcrumbs.

**Tune in next month for the continuing saga of do
it yourself airplanes**

Complete with pictures

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2007 Performance Challenge

Champions Caudill and Pilon were forced to relinquish their 1st place trophy May 17th after strong tail winds caused them to arrive back to the field with excess time. The Logan Family team took first place and the Fitch/Ernst team took second place. It was overheard, after the awards ceremony, that “cheating is the difference between winners and losers.” Had the past champions know this, the outcome may have been different.



For those of you that didn't get to see the four waypoints required for the Challenge. The first was Marshall County airport where a landing was required.



The second was the Bradford VOR where a visual and a flyover was required.



The third was Dave Jackson's grass strip where you had to identify the shape of the object **behind** the barn. The white cross is the pad for a T Hangar.

And the fourth was a landing at Kewanee Airport before returning to



Mt. Hawley. Approximately one hour of flying and navigating the old fashioned way. One finger, one map, a stop watch, and a compass.

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