



Illinois Valley Beacon

May 2010

Chapter 563 Chartered in 1976

Volume 17 Issue 05

The **First Breakfast** will be held on the **First Saturday, May 1st**, in the EAA Hangar from 8:00 to 10:00.

The **Regular Membership Meeting** will be held on the **Second Thursday, May 13th**, at the Chapter 563 Hangar starting at 7:00 pm.

The **Second Breakfast** will be held on the **Third Saturday, May 15th**, in the EAA Hangar from 8:00 to 10:00

The **Directors Meeting** will be held on the **Third Thursday, May 20th**, in the EAA Hangar starting at 7:00 pm. All members are welcome to attend.

EAA Chapter 563

April 8th 2010 Chapter Meeting Minutes

Meeting called to order by President Bob Young at 7:05 P.M.

Secretaries Report:

Sam Sisk made a motion that the previous meeting minutes and the March board meeting minutes be approved as printed in the newsletter, seconded by Chris Tate and approved by voice vote.

Tech Advisor Report:

Sam Sisk stated that he had made a Tech inspection, as an EAA advisor, on a local Sonex Project that was under construction. This plane is being built by Bill Larson.

Young Eagles Report

Marty Martin indicated that there will be a Young Eagles event held on April the 17th after the Chapter breakfast. Marty stated that he could use some help with registration and other ground activities.

Old business:

May 1st Fly out to Lincoln Illinois. After a short discussion as to how to coordinate these type of events. Kent Lynch indicated that he would

handle the coordination of this particular event by emailing a notification to Morrie to be sent out to all members for response as to who is interested in going. Another possible fly out for the future would be flying to a museum in Kalamazoo Michigan.

Bede 5 project:

A motion was made by Jerry Pilon and seconded by Marty Martin to complete the project as soon as possible so that it could be given to the Wheels of Time Museum for their inclusion in the their display starting in May. After discussion a vote was taken and approved by voice vote with one nay vote.

New Business;

On Thursday April 15th a School from Pekin will be bring two group of children ages 4 and 5 to the hanger so they can see what an airplane looks like up close. This event was put together by Al Phipps.

Jerry Pilon stated that while in North Caroline he attended an EAA Chapter meeting that was having a great success in attracting new members. He indicated that he would share with the Board and anyone else who was interested what he had learned about this Chapter and what they were doing as a Chapter to grow their membership.

With no more new business the business part of the meeting was adjourned and Chris Tate introduced, Phil Jones, our speaker for the evening.

Phil stated he had absolutely no interest in aviation until in 2005 when visiting the relatives his brother in law asked him if he would like to fly down to a fly-in. While he was there he noticed all of the planes on the flight line that he had never seen before. He saw a Sonex kit plane and really liked it but was not aware that it was a kit someone could build. When his brother in law mentioned that this plane and many others on the line had been built by individuals this caught his attention and the bug was in the brain and grew quickly. He soon started his training for a pilot license and the week after he received his license he ordered his Zenith 601XL kit.

The rest is history. Phil built the Zenith 601XL and has been doing the modifications suggested by the manufacturer of the kit. Phil had been asked to try and explain why it was necessary to complete the recommended modifications. Chris Heinz, the designer of the 601XL and many other kit airplanes flying around the world, worked on the Concord passenger plane. There is a LSA version of the 601XL made by AMD, a company in Georgia run by one of Chris's sons.

Since 2005 there have been five crashes with no real explanation as to what the problem was that caused them. Some people found that they had some aileron Flutter that was related to loose control cables. The FAA suggested that AMD ground the planes they had built as LSA's until a definitive explanation could be found. The Zenith factory could find no deficiency in the strength of the wings after running additions test on the wings. After the 6th crash the FAA ordered AMD to ground all planes they had built.

Chris Heinz decided to create an upgrade that would strengthen the wings beyond what he felt was necessary so as to satisfy the FAA and give peace of mind to all of the current kit built plane owners and future kit builders. This was not a mandatory change that current owners make to their planes. Phil made the decision to do the recommended upgrade for fear the insurance companies would not continue to insure his plane if he didn't make the upgrade.

This upgrade consisted of strengthening

the wing and center spar and providing more strength in the wing rib where the aileron control cable pulley was attached. This upgrade should add 28 lbs to the empty weight. The FAA thinks that aileron flutter was the main cause of the problem. Zenith feels the problem was probably caused by poor maintenance or poor piloting and not a design error. Phil stated that he has no regrets getting his pilots license and building his 601XL. Oh by the way he really like flying.

Respectively Submitted:

Your Secretary
Donald Wolcott

EAA Chapter 563 April 15th 2010 Board Meeting Minutes

Meeting called to order at 7:06pm by Chapter President Bob Young.

In attendance was Chris Tate, Morrie Caudill, Kent Lynch, Jerry Pilon, Don Wolcott and chapter member Greg Lepine.

Treasurer's Report:

Jerry went over the Chapter finances and stated that with upcoming lower utility bills we should start to get back on budget.

Secretary's Report:

The previous board meeting minutes were read by Don Wolcott. Jerry made a motion that the minutes be accepted as read, seconded by Chris and approved by voice vote.

Old Business:

Kent stated that he had obtained a stamp so as to be able to stamp and identify those items that belong to the chapter. These items will be put into a computer spreadsheet for use for inventory purposes. Kent also suggested that the desk, book selves, and files be moved over next to the rear door so as to more visibility and be more accessible to chapter members. Kent planned to start work on inventory starting the week of the 19th.

The Wheels of Time gave us a form to

complete as to our donation of the Bede5 project and what conditions should be attached if they don't want it anymore.

New Business:

Jerry Pilon shared some of his experience with his attendance of the EAA Chapter 1114 meeting in North Carolina. The board decided to implement some of the procedures that that chapter used to attract new members. The EAA is sending a list of national members within a 25 mile radius. We will be sending post cards to these people that are not current members of our chapter. These cards will have information as to the dates of our meetings and the respective guest speakers. We may need to follow up with a phone call to give them a personal invite. The coordination of this effort will be done by Bob Young, Kent Lynch and Morrie Caudill. Bob Young indicated that Tee It Up For The Troops contacted him about this year's event to be held on August 30th. Last years event raised \$150,000. They wanted to know if we might be able to get some War Birds and other military type planes to come to Mt Hawley for this year's event. Jeff Wales, the FBO owner wants to have an open house at the same time to introduce the airport to more of the public. The Chapter has usually participated in this open house in the past and should attempt to do so again this year. It was noted that the Chapter Sign that was hanging on the outside of the hanger is in need of repair or replacement. The board will look into what materials could be used and how it may be attached to the side of the hanger.

With no more know new business to conduct the meeting was adjourned at 8:30pm

Respectively Submitted; Your Secretary
Donald Wolcott

Email from Bill Hounshell

Hi guys,

I just put together what I think is a pretty good description of exhaust value failure based on a series of messages and pictures from an Internet acquaintance. You may be interested.

Best, Bill

Pic #1

Note the edge erosion at 10:30 to 12:00. The dark area from about the 12:00 to 3:00 is very obvious in this photo. It doesn't quite jump out at you like that in real life. We didn't see anything wrong when we were looking at the parts. It wasn't until we sat here at the computer looking at the pictures that it struck us. I thought this was a nice shot of early/incipient failure and wanted to share it with the group. Valve guides were worn, and valve noticeably wobbled.



Pic #2

You can see the area on the valve seat where there are exhaust "stains" that nicely match the hot area of the valve.



Pic #3

Here's the first shot of the valve itself. You can just see the dishing of the valve face--the tulip shape.



Pic #4

Here is a side-on shot. The valve face is nice and flat on the left side but dished (tuliped) on the right side. There is a shiny spot (and a matching spot on the opposite



side) next to the tuliped area. I've highlighted the valve face discrepancy.

Pic #5

I've circled the shiny spot in this pic.

The shop claims that the exhaust valve stems run so hot that there is really no oil lube, so they run dry. When the guides wear



(oval), the valve wobbles and doesn't seat properly. This causes "tulip" wearing on the valve face. Valve erosion starts due to lack of seat contact cooling and exhaust gas blowby.

The shop is right, but the condition is much worse on a Lycoming engine than a TCM because of the design of the rocker arms. The intake manifold pressure is less than the crankcase pressure, so oil tends to move down the valve stem, towards the intake port. The exhaust manifold pressure is greater than the crankcase pressure, so any oil would tend to move up the valve stem, away from the exhaust port.

David Bunion

Email from Rob Meyer

Please check out <http://throughthefence.org/>

There are now US House and Senate Bills ("Community Airport Access and Protection Act of 2010") that would overturn the FAA's drive to outlaw through the fence activities. Our member could contact their representatives to urge passage of these laws.

Thanks,

Rob Meyer

Check out this web site

<http://report.myairplane.com>

It will give you all the information on file with the FAA, NTSB, and I presume the FSDO. There are probably some things listed that even you didn't know about your bird. Give it a try.

Also Check Out

The "**Goodies For Sale**" page of our web site www.eaa563.org. Al Lurie has several interesting things posted this month.

Did You Know

More than half the coastline of the entire United States is in Alaska



What: EAA 563 Monthly Meeting

Where: EAA Hangar at Mt. Hawley

When: Thursday, May 13th at 7:00 PM. -

Topic: Marlin Weekly

Discussion:

As we continue our discussion on different aircraft that can operate on water, Marlin Weekly has agreed to fly over his Cessna 172 with Amphibious Floats (barring weather issues) from Marshall County Airport. Marlin is also a Pharmacist. He will be talking about 2 different but related subjects. I have asked him to talk about the joy of flying an aircraft with Amphibious Floats but also to get into how different RX and Over the Counter drugs can affect pilots while flying. Please come join us and bring your questions.

Please come welcome Marlin and enjoy the evening.

May 1 Fly-out

If you are interested in participating in a fly-out to Lincoln, Il on May 1, please contact Kent Lynch at FlyingLFarm@Telstar-online.net or 309-251-1998. The open house is scheduled for 10 AM to 4 PM. Since that is a chapter breakfast morning, we can go down early after breakfast or do an afternoon trip, depending on the participants' schedules.

A Look Ahead to Next Month

Our June speaker will be Michael Gallagher. He is the Contributing Editor for World Airshow News. He lives in Peoria and is also interested in becoming a Sport Pilot and possibly building a Kitfox. I told him that Jerry has one in the hangar and he is anxious to see it and talk to Jerry about it. I will do a flyer as we get closer.

Christopher M. Tate

Young Eagles

Saturday, April 17th, after breakfast, we had another Young Eagles event. Three airplanes, furnished by Kent, Jerry, and Brent, flew 10 young people.

Head Start Kids

Thursday, April 15th, the Chapter entertained two bus loads of kids from the Tazwell-Woodruff Head Start Program. They ranged in age from 4 to 5 and wanted to get up close and personal with an airplane. We let them sit in the planes in the hangar and they got to see several depart from the airport.



What a cutie. They really had a good time. Al Phipps furnished them all with a necklace that had a small plane on it.

A Major Chapter Event Also Occurred This Month

The BD-5 was completed and moved to the Wheels of Time Museum as intended by the membership at the last meeting. The plane was moved to the museum and is hanging from the ceiling in the high bay, just in front of the Fockler Tri-plane. Greg LePine did the fastening work on the high scaffold.



The plane looks right smart hanging there and will get the attention of nearly 6000 viewers this year.

The project was donated to the Chapter by Bill Engel several years ago with the intent that it would never fly and would be used to promote the Chapter.

The wings were shortened to make it easier to transport and the display poster, being prepared, will feature Chapter information for the viewers.



WHEELS O' TIME

MUSEUM

PEORIA, ILLINOIS

**AUTOS, CLOCKS, TRACTORS
FIRE TRUCKS, MUSIC MACHINES
TOOLS, TOYS, TRAINS**



ILLINOIS VALLEY CHAPTER 563

5320 N SHERBROOK LN
PEORIA IL 61614-4851

stamp

address

MAY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
APRIL 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	JUNE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29					1ST BRKFST
2	3	4	5	6	7	8
9	10	11	12	13	14	15
Mother's Day			Class de Mayo	Last Quarter		2ND BRKFST
16	17	18	19	20	21	22
				DIR. MEETING		First Quarter

The Regular Chapter563 meetings will be held at the Chapter Hangar at 7:00pm on the second Thursday of each month.

All Chapter 563 breakfasts will be held at the Chapter Hangar from 8:00 am to 10:00 am on the first and third Saturday mornings.

The Chapter 563 Directors meetings will be held at the Chapter Hangar on the third Thursday of each month at 7:00pm.