

Experimental Aricraft Association - Rock Hill, SC - KUZA

## EAA Chapter 961 Flyer

SOCTOBER 14th, 2019

Facebook <u>www.facebook.com/EAA961/</u>
Website http://961.eaachapter.org

Managed by member Chris Kelly <a href="mailto:chris@control1comm.com">chris@control1comm.com</a>

I was asked the other day to write a recommendation for an Eagle Scout candidate. He is most deserving of



this rank. Those that don't know, this is the highest rank in Boy Scouting and required a strong commitment and a lot of hard work. It is a very prestigious rank and one of the few regrets I have, in not completing mine. I was given a packet that gave me some guidance in how to compose the letter and to whether he had lived up to the Boy Scout Oath and Laws. This caused me to reflect on my own life and how it has shaped me. While not a formalized as BSA, EAA has some tenets too.

One of EAA's mission statements is to grow participation in aviation by promoting the "Spirit of Aviation". I thought about how we as individuals and collectively as a chapter do this. We were certainly big time involved this past weekend with the KUZA Day. A very public display of our many talents. EAA just isn't about building airplanes and flying to breakfast club.

There is a line from the movie Air America (if you haven't seen it, do) where one of the characters states: "Do you feel like you are the weird guy in the room when with non-pilots?" How many times has that happened to you, the "Aviator". When people find out that you fly, they are fascinated. I always get the "You Fly Airplanes?"

My reply is "Don't you?". Of course the next question is "Have you crashed or had anything scary happen?" My reply is always the smart alec reply, "Yes, once a flight attendant called my house and my wife answered the phone".

That really didn't serve aviation very well, did it. Funny, but not helpful. Another example, I say that my school teachers always said I wouldn't amount to much because all I did was look out the window and talk to friends, so I got a job (flying) were I look out the window and talk to my friends. Truth be told, I feel that people in the EAA and pilots in general, are smarter than the average. Most probably had above average GPA's. All have been successful in life, some that I admire right here in our chapter are such people. People who came form little and overcame to be highly successful.

So what I am trying to say is, that what makes a great Eagle Scout, the passion, drive and a sense of accomplishment is the same in aviation. People watch. They treat you a little different when they know you are a pilot. Try and use this to open a conversation about the joys of being off the ground. Maybe you can spark someone's passion for flight. Encourage someone to try it for themselves.

IF you try, then I'll try to bite my tounge to do a better job at promoting aviation to our ground bound friends.

Again, thanks for all you do. See you around the pattern while I'm "looking out the window, talking to friends".

Rick

Extra, Extra, Extra!!!

This is a heartfelt THANK YOU to all of the volunteers that worked KUZA Day yesterday. You all again not only impressed me, but I do think we made a very positive impression on the community.

You guys, as always, turned it on for breakfast. Turnout was outstanding. Special thanks goes to the clean up crew as some of us had to leave to attend YE briefing.

Special thanks goes to the Young Eagles crew. Bob Kudwa did an amazing job in organizing. He said Frank Smith, and Keith and Deb Dunne made all the difference. Bob said an official 110 kids flown with somewhere in the neighborhood of 130 unofficially. The final count is on going. The ramp crew did an amazing job of keep airplanes moving and safe in the "hot" zone.

Again, THANK YOU. What a great group to be associated with. I am truly honored.

Rick Maury President

## Chapter 961 now has an internet forum.

We hope this will be useful both for members who don't currently have an airplane and would like to take a ride with another member who does, and also for those willing to give another chapter member a ride in their aircraft.

Go to www.961.,eaachapter.org

At the bottom left of our Chapter 961 home page, there's a link to our "Chapter 961 Forum". Click it and register if you'd like to join.

## YOU MUST BE A CURRENT MEMBER TO BE APPROVED TO POST

It's set up as a private forum; and once I approve your registration you'll be able to see the topics and make posts to the forum.

We've decided to keep it a private forum so you may exchange phone numbers and email addresses with each other and not have those visible to the public.

Give it a shot, we hope it will be helpful for getting more chapter members up in the air together!

Chris Kelley...
Chapter 961 FACEBOOK and WEBSITE Manager

## iT'S PRETTY COOL HOW THE CHINESE PEOPLE MADE UP A WHOLE LANGUAGE JUST USING TATTOS

# John Long Treasurer's Report





# Balance as of AUGUST 27th, 2019 \$5,368.30 + 2 new members and 2 not renewing makes the current membership 122

The following members have ordered Name tags and not yet picked them up. Cost is \$10/each;

Brian & Betty Ann Dominick, Tyler Gura, Roger Milne, Angela Sells, Ravi Thakkar, & Lawrence Wayne Thomas.

Also, Lee Wenninger & Mark Hines should have theirs by the meeting.

Phil & Wesley Kuitems have both shirts and name tags in. Your cost is \$33 for each..

Keep spreading the word, it works.

John





## YOUNG EAGLES FLIGHTS

Bob Kudwa Young EAGLES COORDINATOR kude@aol.com

WOW... I don't know what else to say about the level of participation this last Saturday. You are all amazing, from the set-up to takedown, the breakfast crew and the too numerous to remember names of folks who showed up to sign up kids, escort them, fly them and control traffic and keep track of the approximately 141 kids that we flew....

A humble THANK YOU to all... Bob



Our September Chapter meeting program was presented by VP Louis Kantor and Joe Baker as a look back and highlights of the 2019 EAA OSHKOSH AirVenture.

Louis is shown in the first two photos highlighting points of interest in the many varied areas of the week long event, during

which the Oshkosh airport becomes the busiest airport in the world.

In the second photo, VP Louis is pointing out the amazing statistics of this event. With an attendance of more than 642,000 people and over 10,000 aircraft showing up during the week, quite a few camping with their aircraft and many renting Rv's, tent camping on the grounds and many flying in to nearby strips and staying in facilities nearby.



Not shown is Joe Baker who presented a picture tour of the grounds and the amazing variety of unique, antique, military and home built aircraft among the thousands that flew in, in spite of the rainy start.



President Rick Maury is shown here presenting Louis with our traditional "Thank You" plaque that is given to recognize those who present the programs. Not shown is is Joe Baker, whose plaque mysteriously appeared in his hanger, delivered the proper way, by air.

If you have a program idea, let us know and we'll follow up on it.

#### Goin' South - A Cautionary Tale

or "What to Remember when it all Melts Down".





WHAT HAPPENED? How did a (supposedly) fully checked-out, rebuilt piston aircraft engine turn into a pile of slag on climb-out during first flight (FF)?

Let's turn the clocks back to May 2013. The day after our youngest son graduated High School and just before I was to order a Zenith Ch750 STOL airframe kit, the proverbial '95% complete' Ch750 STOL appeared on Barnstormers, only 90 miles away! I hurried over to see it and was immediately smitten. The v1 (2009) Zenith was indeed complete except for final assembly, engine break-in and flight testing. All the parts were included, along with meticulous documentation and complete traceability, including all receipts (crucial!). The builder had been a machine shop owner/operator and had worked closely with Zenith and other nearby builders during the 4-year build process. He had chosen the very Jabiru 330 120 HP 6-cylinder horizontally opposed engine and avionics packages that I had been prepared to buy and install, with one major difference: the engine was a rebuild from a used, 1st-generation (Gen1) Jab3300. But Jabiru had only upgraded to Gen2 by 2009, and to Gen3 by 2013, so a Gen1 engine was not unusual. After talking with Zenith and Jabiru and studying the extensive build documentation, I satisfied myself that this kit had been well-built and documentated. Where his wife's sudden illness had prevented him from finishing and flying the plane, I was perfectly positioned to do so. Or, so I thought.

The Circle of (Kit) Life - The following is an all-too familiar kit builder progress log: 05/2013 Zenith Ch750 purchase-On to final changes, certification and FF! 06/2013 Job Change-1; 2 full time ->1.3 full time incomes 06/13-10/14 Job Hunt, customize Ch750: Folding wing option (FWO), quick trailer 11/14-11/15 Job change2; AA/USAir merger starts; CLT property search begins 12/15-04/16 DC->CLT moving preparations, 3 NC airport home purchase defeats 04/16-12/16 Final airport search -> SUCCESS! Clover Base, SC 01/17-11/17 Clover Base farmhouse renovations, runway & hanger construction 12/17-01/19 Ch750 final push to FF: Gen1 Jab3300 start-up attempts from 03/18



So again, the short version: from the first builder purchasing, rebuilding, and installing the Gen1 Jab3300 to my filling it with oil, mounting the prop, and first start-up attempts, almost five years has passed. Jabiru North America (NA), as well as the original builder and other local Zenith builders all continually reassured me that the carefully-sealed and stored engine would start right up. But despite taking the official Jabiru rebuild class, boroscoping all cylinders, double-checking all circuits, re-setting the carb and with much help and encouragement and trials with fellow EAA members and Jabiru NS, my Jab3300 refused to start, then to idle at all. The documentation was still intact but the memory of the original builder began to be fragmentary. Despite all the other progress on our Zenith kit upgrades, familiarization with aircraft. avionics, etc, the conclusion was inescapable: I had waited too long to test-start the engine, and put too much faith in what I had been told.

#### Devil'in the Details

We dug deeper into the records. The Gen1 Jab3300 had indeed been purchased as salvage after a prop strike and then rebuilt, but not by the original kit builder. Lacking the expertise, he subcontracted to an engine rebuilder, a professor at a local community college, who used the rebuild process as an example in his classes. We finally decided that at the very least, the mechanical timing, cylinder head condition and assembly torques could all be suspect. But there was to be more. It was time to call on the experts.

In August 2018, I dismounted the engine and trucked it to Jabiru NA in Shelbyville TN. Over three days they tore the engine down to the short block.

We found connecting rods installed backwards, bolts without Loctite incorrectly torques and lubed bolts and other smaller issues. On the last day, the re-assembled engine started right up and ran smoothly on their test stand. four separate times. Problem solved (?). I returned to Gastonia, re-installed the Jab3300, re-mounted the prop, completed the static run-ups, made final subsystem checks, performed the weight and balance and submitted the Zenith for FAA certification, which was finally granted in late November 2018.

Belle d'Alsace handled well in Slow and Fast Taxi Tests, seemingly straining at the leash. Her engine temps and pressures continually showed normal. Sub systems were all GO, except for intermittent headset/intercom jacks. I made the decision to start flight-testing with a handheld radio and headset adapters. Once the holidays were completed, the very first nice day of 2019, January 6th, dawned smooth, calm, dry and 72 degrees. Normal pre-flight, ground support crew briefed and in place, and a good taxi resulted in a quick, wobble-free takeoff from Runway 21 at KAKH. Climbing out at 2250 rpm, I enjoyed smooth handling until just about 1,000' AGL, when the engine suddenly began to run roughly. I throttled back to 1320 rpm and made a full right-hand circuit to an easy landing back on 21. Believing my problem to be simple (carburetor settings, perhaps?) I left on a 10-day family vacation, wondering what I would find upon my return.

#### **Back on the Chain Gang**

A quick tear-down showed that the engine was melting down on climbout. It had not seized, but the aluminum pistons were turning to slag and had started coating the cylinders. Back to Jabiru NC (now Arion Aircraft) in TN, and it was clear that nothing but the block and crankshaft could be salvaged! Closer measurement and a re-reading of all receipts found the culprit: the original Jabiru steel Gen1 cylinders had been over-bored past specs, new pistons had been remanufactured from incompatible aluminum alloy and competition auto racing rings that were incompatible with ashless ircraft oil had been fitted. The piston design looked identical to earlier Jabiru pistons, enough so that they had fooled the mechanics the previous summer. But although it had passed static runs, this engine was just a poser, a clever fake. Once full takeoff power was set, there was no lubrication and the engine was doomed.

All that work, time and frustration had resulted in five minutes of flight.

But the smooth handling proved that all the flight control rigging, inspections, weight and balance, flight planning, taxi tests, runway hops and endless mental rehearsing of this First Flight had been worth every minute, every penny, every drop of sweat. I walked away, unharmed, from an uneventful landing. (This was not my first engine





Eventually we bought our Belle a brand-new, all-aluminum Gen4 Jabiru 3300. This engine fits the same mounts and harnesses, starts right up and sings sweetly. Our second First Flight together on 8/06/19 revealed incorrect prop pit, three days later revealed a suspect EFIS. Going forward, more mods and upgrades will be made. But the preparation, the mental rehearsals, will always continue, because this is now the Flight Test Phase. After six long years, we are finally here and we'll be ready every time for that unexpected problem.

Everything I needed to know, I learned in the EAA: Here are the key points:

- 1) No 95% Complete Experimental EVER IS! Start from the beginning and review everything.
- 2) If you didn't rebuild the engine yourself, do it again, from the crankshaft on up or buy a new one!
- 3) Buy the upgrades you NEED, not the ones you think you can AFFORD! It will always seem like a good investment after the fact.
- 4) Take photos, organize them, keep your documentation and review it all! We might never have learned what happened otherwise; even dull repetitive photos can hold clues.
- 5) Nothing in your life is more important than preserving it! If you buy and experimental aircrft, especially and incomplete kit, give it

priority. Stop everything else and go through everything about the aircraft, most especially the engine. The longer you wait the more you will lose the data.

- 6) Take all the time <u>you</u> want before First Flight! No matter how frustrating, being REALLY ready turns potential terror into just a major annoyance and a life lesson learned.
- 7) Seek out the experts! The best place to start is with the EAA. My own HONOR ROLL is below:

EAA 309: John Car, John Garabedian, Paul Grieshaber, Ross Gresley, Joe Hamm, Holiday Obrecht, Matt McSwain, Bob Thayer, John Wigney, John Wyatt

EAA 961: Tom Dubroulliet, Tom Edwards, Les Kanna, Dick Kruse, Ed Lee, John Long, Rick Maury, Bob Owenby, John Roberts

Fellow Zenith Builders: Ken Elias (VA), Harold Haines, Gary Lail And OF Course: Zenith Aircraft, Arion Aircraft, Aircraft Spruce, etc... MOST ESPECIALLY: Simone (the real Belle d'Alsace) and children Kelly, Jessica and Connor, all steadfast.

To everyone listed and to everyone who should be, <u>THANK YOU</u> FOR HELPING ME GET OLDER AND WISER!

THE REAL BOTTOM LINE: There is always going to be some risk and we all accept that and are (hopefully) prepared. Expect that it can happen anywhere, any time and keep learning. It's the soul of what we do. Mike Drews

If you have information that you think may be interesting, please forward it to Dick Kruse, Secretary Chapter 961 krussr05@gmail.com

# Amazing Anagrams The Morse Code = Here Comes the Dots Slot Machines=Cash Lost In 'em Eleven plus two=Twelve plus one

### THIS COMING MONDAY, OCTOBER 14TH, OUR REGULAR CHAPTER MEETING, WILL HAVE TWO PURPOSES

FIRST There will be nominations for the 2020-2021 slate of officers for the chapter. You will be able to nominate a current EAA 961 member from the floor OR, place your own name up for consideration (its called volunteering) if you so desire.

The FOUR chapter Officer positions that will be voted on at the November 11th meeting are; President, Vice-President, Treasurer & Secretary

Various other committee slots will be filled by the incoming officers as needed, so start thinking where YOU can serve the chapter.

Our chapter has grown by nearly 50% in this past year and this may be the time for you to help share the chapter work load. A couple of areas easily come to mind. Young Eagles, Meeting Set-up / take down and Refreshments, Member Roster management, Logo attire and name tags, Social events and the annual Holiday Celebration.

SECONDLY, The presentation by professional weatherman Scott Dennstead. You won't want to miss this one.

**Dick Kruse Secretary** 

October 12th, Fly-in breakfast at KAKH, Gastonia, this coming Saturday, starting at 7am 'til11. AvGAs \$3.99 per gallon.all in. Pancakes, breakfast burritos and lots more, Presented by "Academy of Aviation"

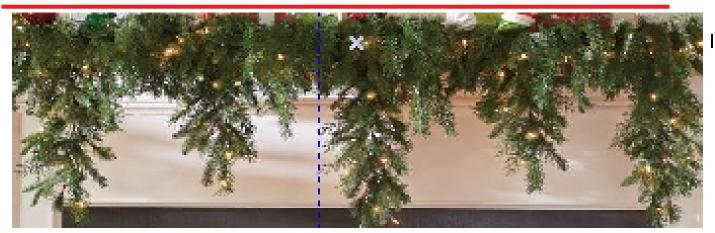
OCTOBER 19th, Saturday, an EAA Chapter 961 "Family and Friends" hanger cook-out at the Taxiway J hangers, Rock Hill Airport. Starting at 4:30 Chapter provides Burgers and Dogs and soft Drinks. Bring something to share. That evening will also be "Hanger Movie Night" starting at 8 pm in Joe Baker's hanger. typically featuring a "Classic" aviation movie. Bring a chair and snacks to share.

**November 2nd.** 01SC, York, SC, starting 10-ish, there will be the "BURNT DAWG" TAIL DRAGGER FLY IN. Dawgs starting around 11:30, LAND AT YOUR OWN RISK. Come and have fun with other tail wheel pilots. You are welcome to bring chips, beans, whatever you want. 122.9, Left hand pattern 36/18. There should be somone there to direct you where to park your plane. Your hosts, Eddie and Debbie Shields.

**November 11th** Regular chapter meeting including the election of chapter officers for the 2020-2021 term. Nominations taken this coming Monday, October 7th at the meeting.

We will also have a program presentation by Stacy Lutes on the AIRCAM aircraft.

There is always time to socialize and your chance to step up and volunteer to help make the next two years even better than previous years.



December 10th, a TUESDAY, in place of our regular Monday meeting.

It's finalized friends and members... The chapter's annual holiday party will be at "The Cove Restaurant", (formerly "the River Rat") 5301 Hwy 557, Clover SC 29710.

It will be a buffet style meal and include a dessert. Price will be \$35 per person. Bar beverages will be additional

Checks will need to be made out to "EAA CHAPTER 961" and received by our esteemed treasurer, John Long, no later than November 30th.

The party starts at 6pm so please plan to be there to socialize and get acquainted.

## RUNWAY CLOSURES AND AIRPORT EVENTS

**KLKR** Lancaster County Airport will be closed October 14-due to re-painting of the runway.

**KEQY** There will be a 5K run on the runway taking place November 2nd from 7-9 am. Runway will be closed during that time.

Signage and lighting up-grades will be taking place evenings, between 10 pm and 6 am, Oct. 7- 25th, excluding weekends. First phase, Oct. 7-10. Second phase will be Oct 14- 18th. Third phase Oct 21-25th.

During those hours airport will be closed to all operations. Power will be off to runway and taxiway lighting. PILOT CONTROLLED LIGHTING WILL NOT BE AVAILABLE..

November 9-10 IS THE MONROE AIR SHOW. NOTAMS WILL BE ISSUED FOR AIRPORT CLOSURES.

The **B-17**, "**MEMPHIS BELLE**" WILL BE BACK, arriving The 6th of Nov and flying rides the 7th and 8th

# EAA Chapter 297's Annual FALL FLY-IN and ANTIQUE CAR SHOW



# Saturday November 9<sup>th</sup> 10:00 AM = 2:00 PM

Come enjoy: JORDAN'S CHAPEL BAR-B-QUE LUNCH Aircraft Project Displays - 50/50 RAFFLE

> PRESTIGIOUS AWARDS PRESENTED FOR: Best Aircraft - Best Automobile - Longest Flight

STAG AIR PARK (7NC1) -- N 34 31.67 / W 077 51.01 -- 2NM ESE of Burgaw, NC Runway -- 11/29 4000 ft Turf CTAF 122.9 Fuel Available: 100LL Aviators Lane, Burgaw, NC 28542

For current field conditions see EAA Chapter 297 on FaceBook, or Contact mnthoman@embarqmail.com – (910) 577-5446

Fly Safely – Fly Courteously



## Looking For or For Sale by 961 Members

# WANTED Electric Tow Bar for Cessna 182 Brian Dominick 704-589-0444 briandominick@carolina.rr.com

## FOR SALE-Partially Completed Zenith Zodiak

Zenith Zodiac 601XL air frame is nearly completed. Fuselage is finished, control cables routed through the fuselage, empennage is completed and parts for wing are included as shown. Zodiac 601XL drawings & manuals 2nd edition, construction manual edition 2, photo assembly guides, construction log book and many other manuals and tools included used in addition to the ones shown.

The original owner completed this with build logs and did a quality job with the construction, it is very well documented and confirmed by an A&P pre-buy inspection. I took over the project but I don't have time to finish it as I'm completing my commercial license and building my hours to fly for the airlines.

Contact Tyler Gura, Owner: located for inspection near Statesville Regional Airport-KSVH THGaviator@gmail.com Cell-(980)-225-2251

Feel free to reach out for additional information.











FOR SALE \$20
CISA, Hardened Prop Lock
contact Dick Kruse
krussr05@gmail.com

## Ever dream of having or living on your own private airstrip?

Here's your opportunity.

## UNITY AERODROME SC76 NOW AVAILABLE



2,600' by 100' turf runway aligned 03 / 21 with additional 200' run off area, south end.

Property access from the north end via Shilo-Unity Road,

Approximately 60
acres with two
beautiful, buildable
homesites available,
directly adjacent to the
runway north end.

Registered and formally recognized by the FAA as an airport.

Asking \$600K

Contact Ed Lee at <a href="mailto:edclee@comporium.net">edclee@comporium.net</a> or Les Kanna at <a href="mailto:leskanna6@gmail.com">leskanna6@gmail.com</a>

**2 Transponders for sale**. Both were removed for upgrades. One is a King 76, face is worn but was working when removed. Other is a Bendix/King 76A, also working when remove. \$100 for the older 76 and \$250 fir the newer Bendix/King



Terry Griffin trg216@aol.com

803-415-2317



## FOR SALE

Garmin 327 transponder, Installed new in my RV8 in 2011, worked good, removed for ADS-B installation in 2017. Complete with mounting rack, installation manual and pilot's handbook.

Asking \$500.00



John Long johnlong63@gmail.com

#### **CUSTOMIZED CAPS**

Member Eddie Smith wants to let the membership know that the company that is doing the EAA 961 shirts for our chapter also does custom caps.

The following source is providing our Chapter shirts and can provide other items such as: baseball caps with images of your aircraft or anything you desire, embroidered on the cap, copied from a photograph e-mailed to them. Their prices are very reasonable. You can contact them and get a quote.

If you order, tell them Eddie will pick it up for you to save shipping (He's usually there twice a month anyway).

If you desire a unique name tag shaped like your aircraft or state, they can do that also. When you order, please have them call and/ or e-mail Eddie when its ready so he will know to pick it up

signlogic 910-862-8965 www.signogic.biz

Eddie Smith 803-230-3835 easeddie@aol.com

Just a quick note on YOUNG EAGLES FLIGHTS. The Chapter receives a \$5 credit for each YOUNG EAGLE that we fly during the year.

So far this year we have ordered a YOUNG EAGLES banner from EAA, purchased 12 Safety Cones and CAUTION tape.

The YE Credits are "Use it or lose it" and the purchases must be related to YOUNG EAGLE operations. We've used our 2018 balance to purchase the yellow safety vests you saw in some of the photos from the Young Eagles flights from June 26th. We now also have 4 hand held day-glo safety flags and 8 aircraft wands for marshaling aircraft.

Dick Kruse, Secretary EAA 961

Here is the contact info of a few of your Chapter 961 member "CFI"s who are available to do FR's.

Tail Wheel, Check out's, Aerobatic, etc.

John Connor gearupandfly@gmail.com 919-247-8115

Mitch Eudy homes@mitcheudy.com 704-634-0234

David Graham\_jetjockey@comporium.net 980-228-0758

John Staines john.staines@gmail.com 386-846-2956

Tyler Fisher <u>tfisher1112@yahoo.com</u> 704-915-1682

Interested in becoming a regular member of this active and growing chapter? Just fill out the form shown below and send it along with a check for \$ 25 to John Long, made out to EAA CHAPTER 961

(Dues paid now through December will cover 2020)

## EAA CHAPTER 961 MEMBERSHIP ENROLLMENT FORM

Please fill in the information below.

Mail the completed form with a check for \$25.00 (payable to EAA Chapter 961)

To:

John Long, Treasurer EAA Chapter 961 105 Hancock Crossing Lake Wylie, SC 29710

Name:			
Address:			
City:		State	
Zip Code:	Phone		h,w,c.
E-mail address:			
EAA Member Number:		*	
Pilot Ratings:			
Aircraft Owned or interes			

EAA is for both pilots and non-pilots who are interested in aviation. Founded in 1953 it offers activities for the entire family in local, regional and national events. EAA supports and encourages those who are building or restoring aircraft.

<sup>\*</sup>You must either be, or become, an EAA National member to be a member of local Chapters. To join EAA call 800-JOIN EAA or go online at ww.eaa.org.