



Experimental Aircraft Association - Rock Hill, SC - KUZA

EAA Chapter 961 *Flyer*

FEBRUARY 2019

Facebook www.facebook.com/EAA961/

Website <http://961.eeachapter.org>

Managed by member Chris Kelly chris@control1comm.com

I have a hard time coming up with topics for my monthly column. "What can I blabber about that will be of some interest to the group." I could tell tales of my adventures or stupidity, as the case may be, but that's not what you come to EAA



meetings for. Ken Nelson and I were talking a long time ago and he made the statement that he wanted to learn something. Sure, the social aspect is always good; and getting together with like-minded people helps with motivation. But, I think, it's the program speakers we have that draws the interest. We have a wealth of talent in the chapter as well as in the community at large. Which is where you can help. To keep the talent coming, we need your help with program ideas, as well as speakers. If you have any thoughts, suggestions, or ideas, let Dick know. Contacts are always welcome.

On another note, I sometimes get emails and texts and phone calls from you all. I try to answer all, but if I'm on the road and by the time I get your message, the answer will no longer be timely, it goes unanswered. I apologize for that, but it is the nature of my job. We will try to do a better job to post info on our web site for events.

Again, I would like to thank all of you for your participation and involvement. You are what makes the chapter a success

Rick

UNDENIABLE TRUTH

IT IS BETTER TO BREAK
GROUND AND FLY INTO THE
WIND THAN THE OTHER WAY
AROUND

John Long

Treasurer's Report



Balance as of JANUARY 22, 2019 \$5,019.49

An **OVERFLOW** turn out for our January meeting. What a way to start the year. 6 new members since the January meeting.

Remember, if you want a shirt or an engraved name tag, contact me at

johnlong63@gmail.com

or place your order with me at the upcoming meetings. Name tags are about \$10, whatever we are charged for them,

Shirts are about \$25.

Keep spreading the word, it works.

John

**WELCOME NEW
961 MEMBERS**



Ravi Thakkar ravithak@gmail.com
Flies

Mike Ridnouer dridnouer@mindspring.net
Flies 172 from KEQY

Holger Jung holger.jung@clariant.com

Scott Baldus sbaldus@comporium.net
Flies PA28 from KEQY

Glen Ferguson ferguson.msi@gmail.com
Flies from JAARS

Tyler Garu thgaviator@gmail.com
Flies C172/210 and PA28 from KEQY

PLEASE READ REGARDING CHAPTER 961 TOOLS AND INSTRUMENTS POLICY

Chapter 961 Tool Shed.

We, the chapter, own several tools that are for the use of anyone in the chapter. However, they are not to be loaned outside of the chapter.

Our tools consist of a bore scope, a prop balancer, aircraft scales, and a spark plug cleaner and tester. In the future we might even purchase more of these for use in the chapter.

Up to now, we have loaned the tools on a verbal basis. However, recent events have caused us to rethink this. Tools have been loaned out and kept for a month or more. They have been loaned out and then passed on to someone else in the chapter. Recently a chapter member asked to borrow the prop balancer and we could not find it. After much concern it was located and returned. The concern was that it cost the chapter about \$1,500 several years ago.

Beginning with this being published in our newsletter we are changing our procedures. The spark plug cleaner and tester is located in John Long's hangar #706 on Taxiway J at KUZA. Bring your spark plugs and use it in place. You can call John to get the hangar open or Rick Maury and Pick Freeman both have keys.

The prop balancer, scales and bore scope are located in Rick Maury's hangar #301, Taxiway J at KUZA. Call Rick for access or John or Pick if Rick is at work. We will have a sign out sheet there for who has it, when it was signed out and the expected return date. There will be no more passing it along to the next guy. You must return the tool to Rick and get it signed in. Tools can be checked out for one week. If you need it longer just call to get it extended.

This way we will know where the tool is at all times and if something happens and the tool is lost or damaged we will know who gets to pay up

Your Board



Dale Frump
Young Eagles Coordinator



THANK YOU to all who participated in our
YOUNG EAGLES efforts during 2018.

2019 will present several organized YE possibilities
this year, but you don't have to wait.

I have **YOUNG EAGLES** registration materials on
hand so let me know so I can get you the materials
and take advantage of flying those 11-17 year olds
you come into contact with. Remember you must
be current with the

EAA YOUTH PROTECTION PROGRAM

dale.frump@gmail.com

Dale

10 for 2019 – Earn Young Eagles Credits

In order for Young Eagles pilots to earn credits they need to fly at least 10 Young Eagles in a calendar year. Now is the time to make certain that you start toward that goal. You may check on the website

EAA.org/YoungEagles and click on Logbook. Use the [Search Pilots by Name](#) feature to see how many Young Eagles you have flown during year.

Keep on Doing What You Do So Well

Spring is a great time to go flying — weather is improving, kids are back in school, youth groups are looking for activities — take advantage and reach out for these opportunities.

There will be plenty of great flying weather in the upcoming months so we hope you will keep flying the kids and remember — EAA will send you a *10 for 2019 Wing Pin* when you fly 10 Young Eagles this upcoming year.



TENTATIVE
AIRPORT
TRASH PICK UP
SCHEDULED

*Saturday February 16th,
weather permitting, we will be
gathering at the FBO at 8am to
pick up trash from the airport
perimeter*

Weather Permitting

Gardy Wilson

Do you have a program that you would like to see presented for the chapter ?

Perhaps you can do the presentation or send me the contact person and the subject and I will reach out to them

Dick Kruse krussr05@gmail.com

JANUARY 2019 MEETING



What a great turnout we had for our January meeting, a full house by any definition.

Our presenter was John Dennis the new Designated Pilot Examiner for the Charlotte FSDO. John laid out his plan for a Private Pilot check ride in great detail. Very measured and I see it would be a real confidence booster for an applicant to know what would be the plan for the ride .



John was accompanied by his lovely wife Debbie, who was in charge of the power point presentation. There were many questions and requests for explanations from Instructors and pilots alike that John addressed.

A casual announcement was made that a couple of the pilots were planning to fly out to lunch on the next Wednesday. 7 planes and 11 guys showed up. Look for a schedule of upcoming events later in this newsletter.

Dick Kruse Secretary/Newsletter krussr05@gmail.com

This is the SECOND in a series of articles on stability by our member, Gerald McBurney EAA Flight Advisor

I've talked about a couple of variables that are listed on the Flight Advisor's evaluation form. Last article it was a discussion about wing loading and power loading. This time it will be about another variable which is perhaps a bit more obscure but has a definite effect on the flying characteristics of an aircraft; ASPECT RATIO.

Aspect Ratio is the ratio of the wing span to the Mean Aerodynamic Chord (MAC) of the wing. Let's assume that we have a wing that is rectangular in shape like an early Cherokee 140. The chord of the wing is the distance from the front of the wing to the back of the wing (leading edge to trailing edge). Since the wing is rectangular, this distance is the same at any point on the wing. Let's suppose that the wing span is 25 ft. and the chord is 4 ft. The aspect ratio is $25/4$ or 6.25. Note also that the wing area is 100 sq. ft. ($25 \times 4 = 100$). We could have another wing with the same wing area of 100 sq. ft. but it might have a span of 20 ft. This would give us an aspect ratio of $20/5 = 4.0$. These aircraft would fly differently even if the wing loading and power loading were identical.

The computation of aspect ratio gets a little bit more complicated if the wing is not rectangular but say, tapered. In this case the chord of the wing is different at the wing root and the wing tip. You could measure the wing at a bunch of different places and take the average or mean and you would have the mean aerodynamic chord or MAC. This gets pretty tedious and there is an easier way. Just take the wing area and divide it by the span and you get the MAC. The manufacturer or kit designer usually gives you the wing area. Our formula for aspect ratio then is $\text{span} / \text{wing area} / \text{span}$. For those of you that are lost by all this, just think high aspect ratio is like a glider and the low aspect ratio like a T38 or Cassutt racer or Grumman Yankee. By the way, the Cub has an aspect ratio of 6.9, a Cessna 170 is 7.4 and a Cassutt is 4.0.

Any wing tends to lose efficiency near the tip due to the air spilling around the wingtip, producing a spiraling wingtip vortices. Aircraft with a high aspect ratio, such as gliders, have a more efficient wing due to the fact that a larger percentage of the wing is producing lift without being affected by the loss of lift at the tip. If other factors are equal then a wing with a high aspect ratio will tend to have a lower sink rate in a descent, will be more efficient at high density altitudes and will tend to float more in the landing flare. High altitude aircraft like the Piper Malibu use a high aspect ratio wing.

Incidentally, winglets, those funny looking things that stick up a couple of feet at the wingtip, have the same effect as increasing the aspect ratio since they block some of the loss of lift around the end of the wing.

A couple of disadvantages to a high aspect ratio wing is that it is hard to get a fast roll rate, and you need a bigger main spar for strength which means more weight.

Aircraft with a low aspect ratio wing tend to be faster, since the wing has a smaller frontal area. Also, they are easier to make strong and tend to have a faster roll rate. Just the ticket for a racing or aerobatic aircraft. Sink rates will tend to be higher in a glide and they tend to bleed off speed quicker in the flare too. As aspect ratio drifts down towards 5.0, these effects are more noticeable and higher density altitude performance suffers too.



Your EAA chapter now has business type cards with our web site and Facebook page addresses. Chris Kelly has stepped up and is managing these Social Media sites chris@control1comm.com

Please take several and share them with other aviation minded folk who don't know about this wonderful community.

Look for the display at our gatherings and take several cards



Quick Look At Upcoming 961 Events

February 11th Chapter Meeting program



will be presented by the
Charlotte FSDO's Eddie Shields
“Is that plane **REALLY** legal to fly”

March 11th Chapter Meeting Program



will be presented by
Mike Mower
Director of **JAARS MATA**
(**Mission At The Airport**)

April 8th Chapter Meeting Program
will be presented by chapter member
Gerald McBurney, EAA Flight Advisor
“**SAFER FLIGHT TESTS-**
how EAA can help”

He will be discussing FLIGHT TESTING and following up on the articles appearing in THIS and upcoming months newsletters on Flight Testing subjects and design.



May 5th **South Carolina Breakfast Club** will hosted at KUZA by the Chapter. Many hands are needed to make this a success. Contact Wayne Thomas waynes1world@gmail.com and let him know you are available.



May 11th

Ed Lee and Les Kanna have announced they are hosting a “FLY-IN” at their strip.
UNITY AERODROME, SC76*

Please contact Ed or Les if you are unfamiliar with flying into or out of their groomed 2,600' x 100' turf strip.

edclee@comporium.net or
leskanna6@gmail.com

Watch for further information in the coming weeks.

*This is NOT an EAA sponsored fly-in and EAA insurance coverages will not be in effect

October of 2019, there will be a 60th Anniversary Celebration of the Rock Hill Airport, KUZA. The chapter is expecting to be involved and will be looking for volunteers.

If we use the turnout of the last OPEN HOUSE as a guide, there will be many many people showing up.

. More information as the date approaches.

FLIGHT TESTS IN THE CHAPTER

Tom Dubrouillet,
Reporting another
Rv8 First Flight! Serial # 83563 –
Slow Build wing / tail. QB fuse.
First Rivet April of 2016. N563RV
IO360M1B – Hartzell Blended AF Prop Garmin
G3X touch w / GTN650 /
G5 backup /
GMC307 AP controller
Empty weight is 1120 lbs



Mike Drews reports his first flight

I managed to get our Zenith Ch750 STOL airborne at Gastonia on that beautiful Sunday 1/06 but was only able to make a single circuit in the pattern after the engine almost immediately ran hot on climb out. Aircraft handled well and made a normal reduced-power landing on Runway 21. Post-flight inspection revealed oil leaks, major overheating of CYL#5 with destroyed plugs there as well, possibly from valve seat(s) coming loose in flight. Will complete pulling the cylinder head next weekend to see what's what but mainly wanted to say again, "THANK YOU" for all the help, advice and prayers (answered) to help us get this far. A setback to be sure, but one I was well able to walk away from due to PREPARATION, mental and physical, and one heck of a big Ground Crew. More to come

FOLLOW UP TO “FIRST FLIGHT” by MIKE DREWS, EAA 309 and 961 member

The Best Five Percent

Almost every pilot who has ever searched for a kit plane project has heard it before: “She's 95% complete – only the last 5% to go! Ready for (final assembly/battery charge/oil and gas/FAA inspection) and you'll be flying in no time.” Inevitably, there does turn out to be more to the story than that. But regardless, consider: What if the devil isn't really in the details, and the real story is what happens along the way?

When our oldest Son got married last summer, I gave the high-achieving new couple this advice: *The devil may be in the details, but life is in the **moments between**.*

I've learned this truth the hard way, as most kit builders do, but I've also learned to appreciate that we are *permitted to survive* the education only through Divine intervention, skill and good decision-making under pressure, AND through the help of our real Ground Crew. By this I mean our spouses, friends, neighbors, fellow 309 and 961 pilots, build night buddies, and hangar mates. They chip in to help lift a wing, offer advice, inspect our projects, tip us off to providers of tools and testing services and new and used parts and equipment and accessories, and soothe our bruised egos and shaken confidences when schedules slide and frustrations mount. Inevitably, we all learn that *'Five percent left means only ninety-five percent to go'*.

Yet, I have learned an even better mantra. There are a lot of essential life moments as the goalposts widen. Who could know? Almost six years after buying our '95% complete' Zenith CH750 STOL on Barnstormers, we have equipped it with folding wings and a custom trailer, towed it from VA's KJYO to NC's KSVH, rented through the AA/USAir merger while next to NC26, then finally settled on our own property in Clover, SC, just halfway between KAKH and 01SC. Ah, but now there are upgrades to the old farmhouse, hangar and runway to install; not airplane time yet. Finally, FINALLY in the optimistic months of 2018, blazing through that 'last 5%', EAA309 had even provided the ideal Hangar 3-21 - no stopping now! We would finish and make our First Flight there, and use York for grass field and STOL training, before bringing our bush bird home to its greening STOL strip. A perfect plan – except for those last few maddening details: sheet metal parts that didn't quite fit, fuel leaks, electrical grounding, ADS-B upgrades (awaiting flight testing), rebuilt engine troubleshooting/overhaul (second one coming up), control stiffness issues, and four FAA inspections before the golden Special Airworthiness Certificate.

Every issue, each delay, provided another chance to find and correct a potentially catastrophic situation. Fuel leaks? Tighten aged fittings, preventing cockpit fire. Timing off? Tear the engine down, revealing connecting rod bolts with no Lock-Tite, that would have immediately loosened and seized the crankshaft as the rods let go. Each step of the way, there was my heavenly Co-Pilot, and my faithful Ground Crew. The seriousness, cost, and time required to achieve that golden moment - a safe and successful *First Flight* – is and must be slowly, doggedly, and meticulously pursued. But, even after all of this, after every 'T' was crossed and every 'I' dotted, my engine *still* overheated on that very First Flight on that very first Perfect Day of January 2019, and climb out became immediate return with minimal power! Crazy, right?

What have I learned? Simply this – ***The Last 5% is really The Best 5%***, because it introduces you to the Best 5%: your true self, and to the true friends who prepare you for what should not happen, but still could (and did). I wouldn't trade the experience for the world. Thank you, one and all! *Per aspera ad astra....*



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 by Wayne Thomas



2012 ZENITH 601 XL-B \$ 49,500

Very well equipped, based at KUZA
Contact Wayne Thomas for information

waynes1world@gmail.com

803-360-0106

Complete information is posted on Bamstormers.com

***IF YOU HAVE AN ITEM OR ITEMS FOR SALE OR
TRADE,, PLEASE SEND THE INFORMATION AND
PHOTO(S) TO ME
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.

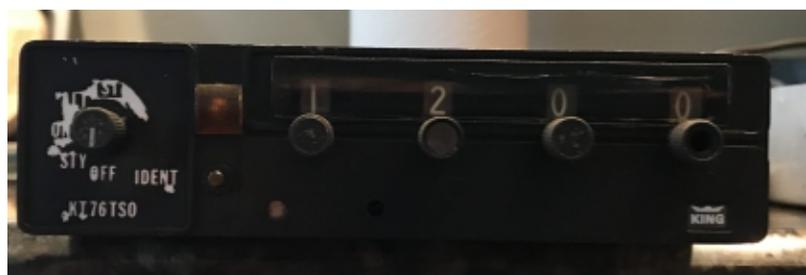
Contact Ed Lee at edclee@comporium.net or
Les Kanna at leskanna6@gmail.com

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... Flying memorabilia from Tom "Pinky" Funderburk

Rare and limited edition,
"Bandits at Ten O'clock High"
14" tall, 14# cast bronze B-17,
signed by the artist, Joe Adams

A collection of almost every issue (28)
of Aviation Quarterly publications. Limited
edition and numbered. 1975-1990.
Beautiful books on special paper with
awesome photography and stories.



If interested, contact Tom "Pinky" Funderburk pinkyfun@comporium.net

BOAT FOR SALE by Mark Accomazzo My good friend who retired as an Army, Command Sargent Major, passed away suddenly just a few months ago. I am helping his widow to sell their pontoon boat. It is a 2014 Veranda with 108 total hours. It has a 70 HP Yamaha engine, , depth finder, stereo, and it is on a Road King trailer. It is stored inside and is in excellent shape. Comes with all the life vests, bumpers.... everything they supplied for their boat is going with it. \$18,000.....please call Mark Accomazzo 7045174244



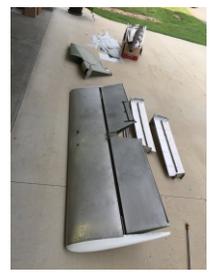
FOR SALE-Partially Completed Zenith Zodiac

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.



CUSTOMIZED CAPS

Member Eddie Smith wants to let the membership know that the company that is doing the 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

FLIGHT REVIEWS

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



Joe Baker	k7cci@yahoo.com	704-564-2807
John Connor	john@connoraircraft.com	919-247-8115
Mitch Eudy	homes@mitcheudy.com	704-634-0234
Dale Frump	dale.frump@gmail.com	804-389-9110
David Graham	jetjockey@comporium.net	980-228-0758
John Staines	john.staines@gmail.com	386-846-2956

If you know of someone who may be interested in joining our EAA Chapter or who may benefit from the cumulative knowledge and experience of the members, please pass this application along to them and invite them to the meetings.

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 interested in: _____

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.

* You must either be, or become, an EAA National member to be a member of local Chapters. To join EAA

call 800 -JON

EAA or go online at www.eaa.org