



**YOUNG EAGLES
FLIGHT IN EDDIE
BREWER'S KITFOX**



**PRE-FLIGHTING WITH
A YOUNG EAGLE**



**PHOTO
OPPORTUNITY!**

182 FLYER



Volunteers working to make the Young Eagles event a success.

President's Column

Hello all,

A lot of events have happened since our last meeting at the CAF hangar at DeWitt Spain Airport. Thanks to them for letting us use this great place.

Contact us at
eaal82memphis@gmail.com

Find us at
182.eaachapter.org

We had a good outcome with numerous members and guests showing up. I gave a presentation about "Repairing Composite Surfaces" and hope it was helpful for future projects or mishaps.

We also discussed the programs for the upcoming year and we got some good ideas from all of you.

I still hope we get some more participation with articles for the newsletter. Please send pics and/or some words from your plane projects or flying adventures. Alan and Rhea will assist you with this.

But right now suddenly the world has changed dramatically due to the Corona virus. It will have a huge impact on our daily lives and the way we can communicate.

Nevertheless, our next meeting on Saturday, March 14th will be held at my hangar at Charles Baker Airport where we will demonstrate the fabric covering of Troy Kent's Hi-Max wings. This workshop will probably take a bit longer than our regular meetings and I hope we can finish both wings. Otherwise, we will include a Sunday workshop to get it done.

Everybody who is interested in a hands-on activity should come out and volunteer to help and learn a new technique.

I wish all members, their families, and friends to stay healthy during this uncertain time and hope we can go flying and building at our hangars as the spring brings warmer temperatures.

See you soon,

Blue Skies

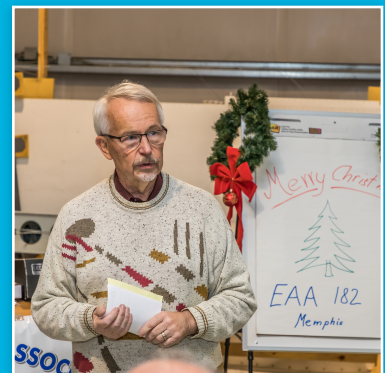
Gerhard Schubert

President EAA 182 Memphis

VP Ramblings

Now that we are well into 2020 and spring is just around the corner, it's time to think about chapter activities for the coming year. Last year we had some good events, good speakers and a couple of excellent Young Eagles days and this year we need to build on that. Gerhard confirmed the Tri-Motor will be coming Sept 30 to Oct 4 for which we will need A LOT of volunteers and by the time you read this we will have had an all-day event covering Troy Kent's Hi-Max project's wings. Your board met at the end of February and came up with some options, but we need

Chapter Christmas Party



(Top): Presentation of annual awards (Center): Gerhard going over our year (Bottom): Time to chow down!

ideas from you for events, speakers, and fly-out destinations. I am working with PMU (Batesville) to have a fly-out and gathering there later in the year and maybe we'll have a chapter trip to visit Dennis Long in his new location in Arkansas.

We also need copy for your newsletter and I know from talking to many of you that we all have some stories or anecdotes about our flying, so please share them! One possibility that the board discussed is having some members visit a different member project each month to get some pictures and write a review. If you would like to volunteer to be part of that team, please let me know. No prior technical knowledge is needed as the project owner will provide that and Alan can help shape the copy if you are uncertain of the best way to present it. It would be a different project each month and it would be a good way to get to know the chapter members and see what goes into a build and who knows, maybe even get a ride - so how about some volunteers?

Finally, I need to put my secretary hat on and remind all that memberships were due January 1st. Dues are: \$35 dollars for individuals and \$45 dollars for a joint membership which includes 2 people, same household, spouse or partner, plus all children under 18 years of age. Please send checks to EAA Chapter 182, c/o Frank Civera, 3085 Stage Post Suite 4, Bartlett, TN 38133.

I also need to remind you if you completed the EAA Youth Protection Program for Young Eagles to please check your renewal date as we hope to have another good Young Eagles year this year. I took the test to renew yesterday (11th) and got confirmation today (12th). Given the current public concern over CORVID-19, we will be reviewing our Young Eagles plans to ensure that we act within any guidelines laid down by medical/state/federal/EAA entities to ensure the safety of any that attend and we will keep you informed of our plan.

CAVOK and Tail Winds,

Gary

Why not build your own exhaust?

After fretting over having an exhaust built for my Skybolt, I came to the conclusion that if I can scratch-build a complete tube and fabric airplane, then why not build my own exhaust? After all, it's just tubing that goes from one point to another point. You and I can do this. These are the steps I went through to complete my exhaust.

First, you need a few basic tools:

- A small band saw
- A side wheel and belt sander combo are very helpful
- An acetylene/oxygen torch or a TiG welder or a MiG welder
- Appropriate welding rods
- Round and flat files
- An extra hand to help hold (but not mandatory)
- Patience

Unless you are really sure about your cowling locations, you will need to roughly mount the engine cowling to determine your exhaust clearances. It is a good idea to purchase enough 1-1/2 in. PVC pipe (Lowe's, HD) and various fittings to "mock-up" the pipes to ensure cowling clearances before cutting and welding your pipes. Let's get started!

What to buy

You will need to purchase exhaust flanges from a source (Aircraft Spruce). You can also purchase pre-welded stubs about 4 in. long for a good starting point. You will have by now decided on the type exhaust you desire. Two or three into one or maybe four or six into one. I chose a six-into-one collector for my Skybolt IO-540 engine. You can purchase exhaust materials from various header suppliers that should include several J-bends (looks like big candy canes) and straight tubes for the build. The J-bends provide 180 degrees for bending for sectioning as needed for the turns. I purchased six J-bends and four straight pieces for my set. Also, I strongly suggest you purchase the collectors from a vendor (they would be very difficult to fabricate properly on your own).

Fabrication

The fabrication begins with a stationary location of the exhaust stubs (at the engine) and the inlet of the two, four or six into one collector. With this, you now have a starting point and an ending point for each pipe. All you have to do now is connect the two points while staying clear of any obstructions in the engine compartment. By using various sections of the 180 degree bends, you will be able to direct the straight portions from one point to the other. Make sure the butt weld joints of the piping are tight and perpendicular to the turns for smooth flow of the exhaust gasses. Tack the joints in at least three places to ensure they don't break apart during final welding. Remove the tacked pipes and weld out with very small weld beads (No need for heavy welding here. It causes too much warpage).

Congratulations!! You have just built your new exhaust system. You can also add a heat muff if you desire. At this point, you may want to consider ceramic coating of the pipes to reduce heat under the cowling. I used Jet Hot. They have great videos.

Go for it!!!

Eddie





Don't be this guy...really...just don't!


Editors note: Page one photo - Goodbye Nine-O-Nine (photo contributed)

Alan Howell, 182 Flyer Editor

March 2020

February 2020	March 2020	April 2020
S M T W T F S	S M T W T F S	S M T W T F S
1	1 2 3 4 5 6 7	1 2 3 4
2 3 4 5 6 7 8	8 9 10 11 12 13 14	5 6 7 8 9 10 11
9 10 11 12 13 14 15	15 16 17 18 19 20 21	12 13 14 15 16 17 18
16 17 18 19 20 21 22	22 23 24 25 26 27 28	19 20 21 22 23 24 25
23 24 25 26 27 28 29	29 30 31	26 27 28 29 30

 EAA

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14  9:00 AM EAA Monthly Chapter Meeting
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

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