# The FlyPaper June 2023

The Official Newsletter for EAA Chapter 477, Charleston, South Carolina

# Words From the President

Summer is almost here and time for our chapter's first Young Eagle Rally for 2023. As this is my first rally as chapter president, I'm counting on all of you to help us out in any way you can. Liz Birch always does an outstanding job as the YE coordinator, but it's a big job to carry out on the day of the rally. We need to keep it fun and safe. Remember, if you see something that is or sounds unsafe, call a time out to get it checked out.

There will be a pilot brief at 0800 and we start flying kids at 0900. For pilots, make sure your EAA child protection course is current. We'll be working out of the Walterboro terminal and there will always be non-participant aircraft operating around us, so keep a good lookout on the ramp, on taxiways and in the pattern. This recent weather has put a damper on my flying, but hopefully we have a nice day for the rally.

I got some texts from our friends in Chapter 1058 in Harstville, SC and it

seems they did well with their Ford Tri-Motor visit. I'm very glad it worked for them and EAA. It seems the young air traffic controller who took us on the tour of the Florence control tower had the opportunity to fly co-pilot in it when they repositioned it to Oak Island, NC. I'm glad she got to do it. Maybe if the EAA B-17 gets back on the tour circuit, we might be able to host that. To date, the B0-17 never required a hangar while on the road.

Well, if you can make the YE Rally, come out and give us a hand. See you then.

Stay safe, John



John Stoll President EAA 477



## Upcoming Events

#### EAA477 Chapter meeting

The June meeting, will be a Young Eagles event at the Walterboro airport. If you can help out, come on out! We will be flying Young Eagles by 8:45, and for the next three hours.

#### South Carolina Breakfast Club:

Please use the following link to access the latest in scheduling:

http://southcarolinabreakfast club.com/2021-schedule



### Young Eagles Report Liz Birch Young Eagles Coordinator

Happy summer everyone! Our next Young Eagles Rally is a go for Saturday, June 10th at the Walterboro Airport. We will be flying kids in three different time slots from 9am-12pm. Volunteers, please arrive some time after 8, pilot briefing will be at 8:30, with the first kids scheduled to arrive at 8:45. If you are available to volunteer for this event, please reach out to me so that I can add you to my list. We are a few volunteers short as of now with a total of 30 kids registered to fly. As always, please feel free to reach out to me if you know of anyone in in the Young Eagles program. See you all on the 10th!

Liz Birch YE Coordinator 217-706-0148 lizbirch2331@gmail.com

## **Aviation Scholarship Program** Dow Sanderson

Things are quiet until the next Ray Scholarship cycle. But stay tuned for when we get back into the cycle.

Blue Skies,

Dow Sanderson, Scholarship Chair

## May Meeting Summary Glen Phelps

At the start of the meeting, we had some good discussion regarding Young Eagle flights. Liz has done an out standing job of keeping this program going. While we didn't know at the meeting, (Liz could not attend due to other obligations), we rather expect her to be working the scheduling and not flying. Time will tell.

We discussed the possibilities of Roy Carson bringing his plane to the event for a static display. Here again, we will see what happens on the  $10^{th}$  of June.

We will reach out to the East Cooper pilots association to see they might provide some aircrat and pilots for the event.

While it is not confirmed as yet, we expect to have a guest speaker at the July 8<sup>th</sup> meeting. Stay tuned for further information and developments.

After this casual discussion, we got into the presentation that John Stoll had prepared regarding the panel construction of his RV-8A. Remember, you can follow his and other EAA members and the work they are doing on their planes through the builders log hosted on the EAA website, if you are a member in good standing.

The instrument panel in the RV is "structural", meaning that the aluminum panel provides structural support to the two sides of the fuselage. It comes in one piece and is then "cut up" to accommodate the instrumentation desires of the specific builders.

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The picture below shows John's panel where the desired cut-outs are made to fit the instruments selected. He noted that if you purchased sufficient items from a particular instrument provider, they will provide panel software that can be used to lay out the positions of the instruments minimizing "errors" in cutting out the openings in the panel.



Once having selected the desired instruments and made the location cutouts, then you need to connect each to the other within the system. Again, the instrument companies provide a circuit for doing so, which minimizes the work a builder has to do, but most importantly, minimizes the possibility of have connection errors. Here is a photo of John's "plug and play" behind the scenes board for this purpose.



Then to add further to the ease of assembly, you can get the "plug and play' circuit connecting cables. This further ensures that what you have will function as expected when installed. This photo shows two bags of cables for this purpose.





Then a "box" is made to house each of the instruments. Shown below is the "stack" that John has made from "trays" provided for each element. These are secured together in preparation to mounting to the backside of the instrument panel.



John was asked how much was invested in doing his panel ast this time. I don't recall the exact figure, but I was quite impressed with what he is getting for his investment, along with the confidence that it will work as desire and without a lot of personal time making harnesses. If I use my plane as an example, I constructed all of the wiring harnesses and indispensable help from Greg Horne in redoing all of the wire ends with the proper crimping to the connectors. My installation seems to work as desired, but is a lot less involved that John's

Thanks John for sharing your experience.

## Aviation Safety and Upcoming Events Ron Malec

## FAAST Blast - FAA Safety Briefing News Updates

As a subscriber to the FAA Safety Team and the NASA Aviation Reporting System 'CALLBACK' Newsletters, I will share updates and information that I believe will be beneficial to all members.

#### **General Information**

#### • Limited Aircraft Registry Services Now Online (FAAST Blast — Week of May 15 – May 21, 2023) The FAA Registry is now offering limited online aircraft registration services at <u>cares.faa.gov</u>. Individual aircraft owners can complete self-guided aircraft registration applications, upload legal and supplemental documents, receive auto-generated notifications, request aircraft registration N- numbers, use modernized online payment options, receive instant notification of payment, and digitally sign Aircraft Registration Applications. Online services will be

#### • Know Your Best Glide Speed (Published in Cleared for Takeoff, 13-Apr-2023)

A significant number of general aviation fatalities could be avoided if pilots were better informed and trained to determine and fly their aircraft at the best glide speed while maneuvering to complete a forced landing.

continuously improved and expanded to include corporations, LLCs, partnerships, and non-citizen trusts.

If you're faced with a forced landing, do you know your best glide speed?

#### What is Best Glide Speed?

Is it the airspeed that gets you the greatest distance? Or is it the airspeed that gets you the longest time in the air? Or are these two the same — the longer you fly, the further you go? Well, as so often is the case, best glide speed depends on what you're trying to do.



The best glide speed provides the greatest forward distance.

The <u>General Aviation Joint Safety Committee (GAJSC)</u> has determined that a significant number of general aviation fatalities could be avoided if pilots were better informed and trained to determine and fly their aircraft at the best glide speed while maneuvering to complete a forced landing.

#### **Going the Distance**

If it's distance you want, then you'll need to use the speed and configuration that will get you the most distance forward for each increment of altitude lost in still air. This is often referred to as best glide speed and, on most airplanes, it will be roughly halfway between  $V_x$  (best angle of climb speed) and  $V_\gamma$  (best rate of climb speed). This best glide airspeed occurs at the highest lift-to-drag ratio. Flying either faster or slower than the best glide speed will result in lessening the glide ratio.

Keep in mind that this speed will increase with weight so most manufacturers will establish the best glide speed at gross weight for the aircraft. That means your best glide speed will be a little lower for lower aircraft weights.

Aircraft	Vx	Best Glide	Vy
C172	53	65	73
AA5A	78	83	<mark>91</mark>
PA 28 161	63	73	79

Not all manufacturers publish a best glide speed. Here are a few examples of some who do

#### **Need More Time?**

If you're more interested in staying in the air as long as possible to either fix the problem or to communicate your intentions and prepare for a forced landing, then minimum sink speed is what you'll need. This speed is rarely found in Pilot Operating Handbooks, but it will be a little slower than maximum glide range speed.

#### What About My Airplane?

If you're wondering about the airplane you fly, you can do some experiments on a dual flight with your flight instructor. Start at  $V_{\gamma}$  or the manufacturer's recommended best glide speed with power off — you did remember the carb heat, didn't you? — and note speed vs. sink rate as you adjust pitch to reduce airspeed. For the most useful results, you should do this as close to typical mission weight as possible. To identify minimum sink speed, look for the highest speed forward that will give you the lowest rate of descent. Knowing these speeds will give you a couple of important numbers to have in the back of your mind should a situation ever warrant their use.

#### How Far Can I Glide?

How many miles you can glide per 1,000 feet of altitude is another very useful thing to know. A rule of thumb for Cessna 152s and 172s is 1.5 nautical miles per 1,000 feet of altitude above ground level. Remember that this is altitude above ground level — not sea level. Consider experimenting to see how far your aircraft can glide.

#### **Forced Landing Tips**

A good way to prepare for a forced landing is to practice power off approaches and landings at typical mission weights. This will keep your skills from getting rusty.

Some pilots will choose a spot between the 1st and 2nd third of the available landing area for an initial aim point. When they see they can make that initial spot, they'll add flaps and perhaps slip the airplane to move the aiming spot to the 1st third of the landing area. This is done to reduce the chance of landing short or a final approach stall while trying to stretch the glide to the runway.

#### Position is Key

For any type of gliding approach, you'll want to reach a key position on base from which you'll know you can make a successful landing. Until the key position is reached, keep the airplane configured for best glide. After you pass the key position, add flaps and gear to configure the airplane for landing and fly the final approach at 1.3 times the stalling speed in landing configuration (1.3  $V_{so}$ ). The FAA's <u>Airplane Flying Handbook</u> contains several helpful diagrams for different power-off landing scenarios and corresponding key points.

#### Airshow and Fly-in Schedule

#### • 2023 Airshows / Fly-ins

○ 18-24 Sep-2023 – 16<sup>th</sup> Annual Triple Tree Fly-in, Triple Tree Aerodrome (SC00), Woodruff, SC

#### Photos

• MCAS Beaufort -



USSOCOM Paracommandos



Look what you can do with a Long Ez and Cozy



Gary Rower



F-35B Lightning II



Fat Albert Low Transition Take-off



2023 Blue Angels Diamond

Until next month - Blue Skies - Stay Safe and Fly Safe

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## **Treasurer's Report**

#### Aimee Pereira

Beginning Balance for May :	\$4,587.12	
Expenses	\$0.00	
Deposits:	\$75.00	5/1 Dues collected

Note: Total Earmarked for Young Eagles = \$200.00

Dues for 2023 will be \$35.00 and payments may be paid in person at a meeting or sent to the following address:

\$4,662.12

Aimee Pereira 107 Timberlake Ct Summerville, SC 29485

Ending Balance for May:

If you are not sure if your dues are paid for 2022 or have any questions, I can be reached via email at: <u>eaa477.treasurer@gmail.com</u>.

