

CATFISH SQUADRON

EAA CHAPTER 797



Live Oak, Florida



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Chapter 797 Meeting: Annual Xmas Party is December 18, 2021



Fly Outs are always fun.

**No EAA 797 Morning Fly-In
Pancake Breakfast
Due to the Xmas Dinner**

From The Cutting Room Floor...

The third Saturday of the month is approaching fast and this month, I'm looking forward to the annual

camaraderie of the Christmas Dinner

Last meeting saw the election of the 2022 leadership/board members. We have a new group at the wheel for 2022. See the minutes included in the Newsletter email for details.

The dinner begins @ 4pm, December 18. It's a potluck, but don't feel you *have* to cook. Traditionally, there is always enough to go around. So, don't let your cooking skills keep you away.

Remember, it's never too early to get your 2022 dues in...



David Poirier
Editor



VMC Club

Due to foreseen circumstances, there will be no VMC program at the December 797 meeting. It seems that the VMC Coordinator has been invited to spend Christmas in Portland, Oregon. Have a Very Merry Christmas and A Happy New Year! See you next year!

Clark Dechant

From Young Eagle to Pilot

Jim Culp forwarded this link to a video. This is why we fly kids. Follow the link...

<https://www.youtube.com/watch?app=desktop&v=3velB9ScMd8&feature=share#menu>

Young Eagle News

Since 2021 is rapidly coming to a close it's a good time to quickly review what Chapter 797 accomplished with regards to supporting the EAA young eagle program. We conducted 5 rallies in 2021 and introduced 92 kids to joy and thrill of flying. We held two rallies in Cross City and three at Suwannee County and in both locations the kids and parents were very appreciative of the effort and opportunity that this program affords.

All of our rallies were listed on the youngeaglesday.org website and this a great management tool for conducting rallies. Most of our regular pilots have already registered there and some of our ground volunteers. For 2022 EAA has implemented an iPad app that allows for the flight waivers to be signed electronically for both the pilots and the parent/guardian. There are a number of advantages to this method: The pilots only have to sign once on the day of the rally and once the app is synched with the young eagles website all the

waivers are automatically added to the EAA database. All pilots despise paperwork so hopefully this new program will eliminate some of that. Of course, this app only works in conjunction with the YE website so all pilots will have to be registered there.

I would like to conduct a rally with a smaller group to test this new iPad app. If any of our members know of a small group that would be interested in having their kids participate in the YE program please let me know and I'll get it set up.

I would like to thank all of the volunteers that made our Young Eagle program a success this year. Without the support of the membership and volunteers that graciously give their time and resources we would not be able to introduce the next generation to the world of aviation.

Merry Christmas and Happy New Year!

Phil Hancock
Ch 797 YE Coordinator
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News Wanted!

This is your newsletter. I am very happy to see that several people have stepped forward with their experiences to fill these pages. Let us know how your project is going or where you've been. It's your newsletter, let's make it about you.

Editor

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SVEC

Copied from The FaceBook Page:

I Spent the day at SVEC Touch a Truck giving kiddie plane rides with three other EAA 797 members. Thanks go to Doug Cleveland, Bobbi Rice, myself, and Terry Martin. We Couldn't have done it without these guys.



Being invited to attend these events is testament to our outreach making us a fixture in the neighborhood.

We also appeared in the Veteran's Day Parade.

Being invited to attend these

*Great job Guys!
Editor*

Flyout Group

We had 4 pilots and 3 planes for the chapter flyout on Dec 11 to Flagler County airport KFIN. The weather was beautiful for the short trip to the east coast. As usual, Highjackers did not disappoint with yummy burgers and Reubens. Cameron flew a Long EZ and Del flew a Cozy 4 place.

See the cover picture: L-R Cameron Bunting, Del Schier, Bobbi Rice, Allen Rice

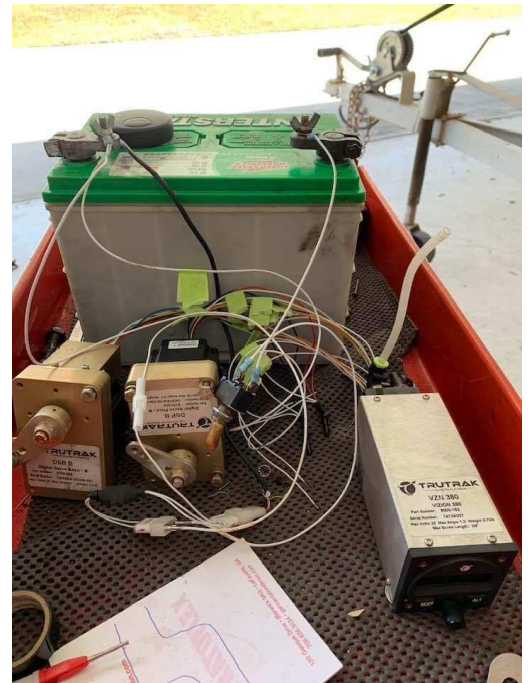
Allen Rice

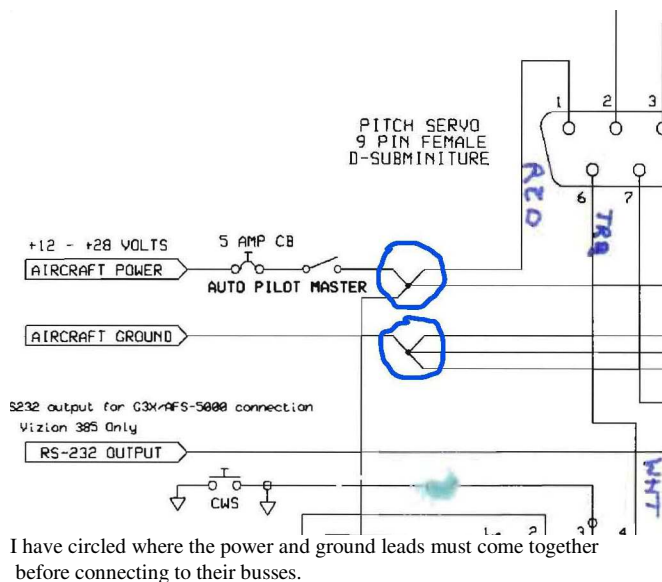
All Grounds are not the Same

As EAA'ers we are usually not hesitant when taking on repairs and even fabrications on our airplanes. Heck, many of us have built complete airplanes from either scratch or kits. So with that experience behind us, how difficult could it be to install a little old autopilot. This is a story of a 6 year saga of fighting with my AP and a simple lesson that may save many of us a lot of aggravation with many types of electronics.

Seven hundred and thirty hours ago, this builder/pilot nervously broke through the surly bonds of earth at 24J for the first flight of his shiny new RV9A. As is common for most first flights, it only lasted for one trip around the pattern before landing and re-checking all systems. The flight was a non-event with no squawks. Later flight testing would reveal however, that I did have a squawk, an autopilot with a mind of its own.

Tru-Trak generally had a good reputation as a dependable and reasonably priced experimental autopilot. Capable of not only following a GPS course, it's internal altimeter/vertical speed sensor also enables it to ascend and descend at a pilot programmed vertical speed, then level off at a selected altitude. So for just \$2400 it's a pretty good deal, unless the autopilot gods have refused to bless your unit.





For 700 hours I was not blessed by the gods. Actually there was one trip to Tennessee four years ago when my devil-possessed AP actually worked for 2 hours. But for 698 hours it has veered, dived, and climbed at will. Three weeks ago I finally worked up the motivation to do something about it.

Over the past 5 years I had done the usual balky avionics dance: sent the control head and servos back to the factory where they checked out fine; checked the continuity of all wires in the 3 harnesses; and checked the grounds for minimal resistance. All this troubleshooting required significant effort, even disassembling parts of the panel, fuselage, and wing for access. Time to get serious!

Even though I still didn't know what the problem was, I ripped out all the AP wiring from the power buss to the ground buss and all servo wiring from the aileron to the elevator. Next, I discovered that fishing new wire through the right wing and fuselage was not fun. My hands are still all cut up from sharp metal edges. The whole time that I am doing all this grunt work, I'm reviewing Tru-Trak's wiring diagram in my mind since I had it memorized at this point. My suspicions began to grow about one inconspicuous section of the diagram.

As impossible as it sounds, I could have made a mistake in 2013 when I installed the doggone thing! So I proceeded to crimp all the little gold d-sub pins for the 9 pin and 25 pin connectors to the servos and the control head. Reinstalled the servos, linkage,

and GPS, and took a close look at the wiring diagram for the power and ground hookups. Uh-oh, I spotted a small but possibly significant difference between the diagram and what I had actually done on my first ill-fated installation. Could a little bitty symbol misinterpretation be the cause of all my woes?

Prior to wiring my RV9A, I had done a ton of research on proper aircraft wiring principles. One of those practices was to always connect ground and power wires to their own separate connection points on their respective busses to avoid interference between radios, transponders, strobes, instruments, etc. So, as a result I have big busses, but happily no interference, pulsing, or static issues. Everything gets its own connection and is happy. I soon found out that this is not always true for some electronics.

In 2013, I had followed my standard practice of separate ground/power connections and connected the autopilot control head ground and power, the roll servo ground and power, and the pitch servo ground and power all to their own connections on their busses. This time, I re-examined the wiring diagram and noticed that all of the AP grounds come together before the ground connection at the buss. Same for the three 12V positive leads. What difference could this slight change where these wires join possibly make?

Apparently a lot because finally, after several test flights, I have a perfectly functioning Tru-Trak AP. Success! Check out the AP wiring diagram where I have circled the grounds and power leads meeting before their buss or switch.

Now those 3 hour flights will be a little less fatiguing and perfectly on altitude and course. Moral of the story: Follow your wiring diagram precisely and don't blame the avionics gods!

Note: if you need a cheap (\$75) but accurate WAAS GPS just for the NMEA 0183 output like the one I wired into my AP, Garmin makes it. Let me know, I'll send you the info.

Allen Rice

I'm sure that I missed something or someone and I welcome healthy criticism. You can send comments, questions, ideas or articles to: dave@davesflyin.com

