



Volume 25-01

www.FlyingClub1.org

January 2025



The Privileged View

Steve Beste, President

Modifying it. Are you a gearhead? A tinkerer? Do you like to fix stuff? If you do, you'll be right at home in our end of aviation. If you don't, you probably won't last long. That's because our aircraft so often require tinkering.

Something broke and the manufacturer is out of business. Or some new gizmo has come out, but it's on you to figure out how to put it on your plane.

In my case, my trike is an Experimental aircraft, so I can legally work on it (though I don't change anything that's flight-critical, thank you).

Here's how my new radio holster evolved, through trial and error and a **lot** of help from my friends.

Here's my radio in the old days. It's an Icom A6 hand-held, wired into both my intercom and the trike's electrical power. It's supported by a RAM-mount arm and plate as you see here. I screwed the plate into the back of the radio – into the battery pack, actually – where a belt clip normally attaches. Happy, happy.



Except not so happy. I often got big static on transmit. That turned out to be caused by using the radio while it's on its charger. So much for my clever design! I needed to charge the battery OFF the trike. Since the battery was bolted to the ball you see the problem. I needed to come up with another way to attach the radio to that RAM mount – a way that would let the radio be easily removed.

This is where Club member **Michael Bishton** came to my rescue. He 3D printed this holster for the radio. The radio's belt clip – now re-attached – fits into a tunnel above the ball. Inside the tunnel is a slot where the tip of the belt clip lodges, securing the phone.

Alas, the 3D-printed ball proved to be too weak. It rotated and was bendable on its stalk.



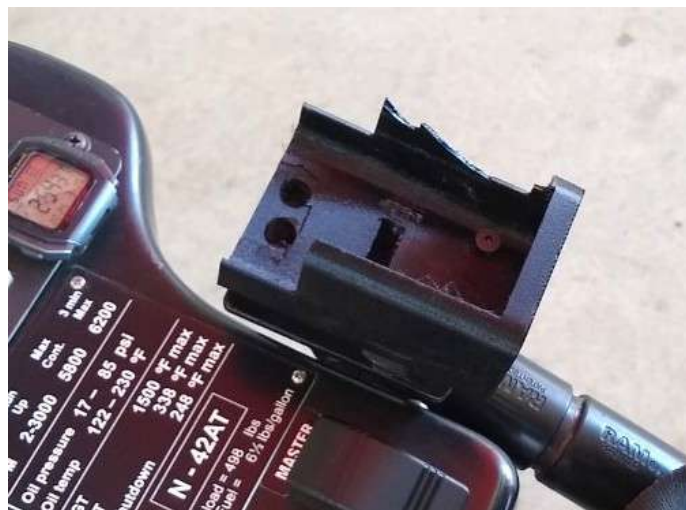
I re-used the old RAM plate and screwed the 3D holster onto it as you see here, using a block of wood behind the tunnel for support.

This was **solidly** attached!



Unfortunately, experience showed that the design was still flawed. When climbing into the trike, I cracked one wing of the holster with my foot. This would definitely happen again.

- The plastic needed to be thicker, and
- The design should avoid the free-standing wings if possible.



At this point, Club member **Jeff Crider** got interested in the problem and offered to print the next iteration in the design. Here it is:

- Thicker plastic.
- No wings. This was possible when we realized that the speaker could be covered since the radio is used through the intercom when it's on the trike.
- Four threaded brass inserts for securing the holster to a metal plate.



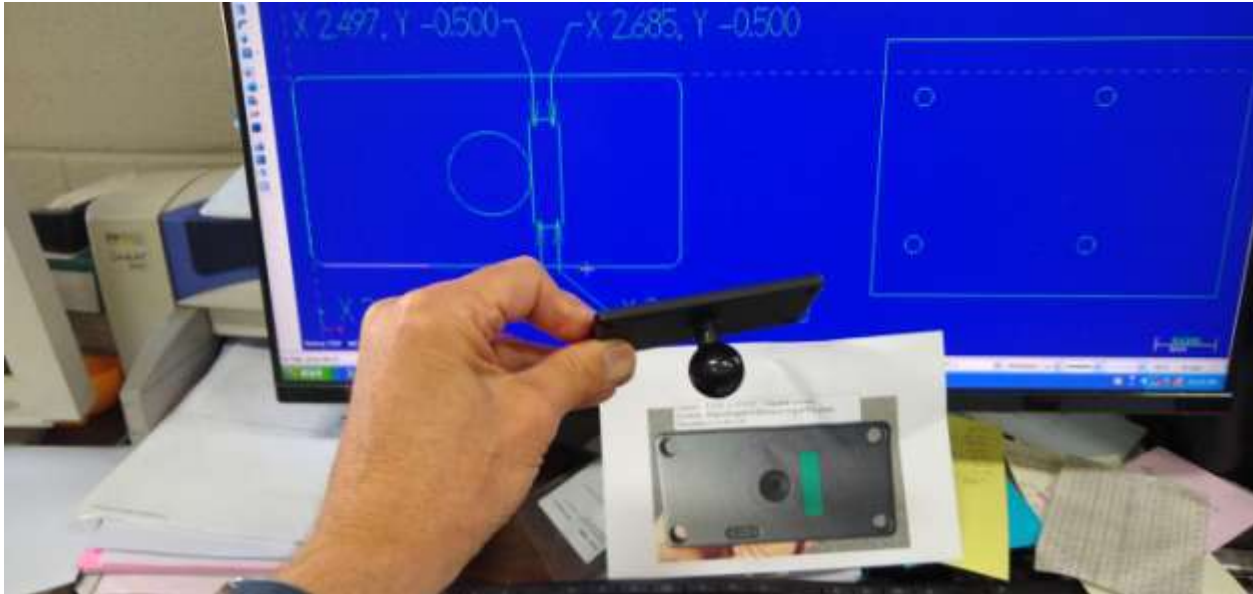
I dispensed with the tunnel in favor of having the clip reach over the whole plate with the tip engaging the rectangular slot in the plate.

However, the thicker plastic meant that I would need some spacers under the clip as you see here.



But how to make that slot in the plate? I don't even own a drill press. I could do it with a hand drill and a file and make a hash of it. Or I could take it to machinist Luther Taylor, who is L&J Machine in Culpeper. I love visiting his shop, and I hadn't seen him in awhile.

He started by modeling both the plate and the holster bottom in his CAD software.



Then, he cut the slot and the four screw holes. For this, he used one of his old machines. He has a \$125,000 Hurco milling machine that he said could do the cuts in 30 seconds. But the setup time meant that for this simple one-off, he was better off doing it by hand.



Guided by the blue position digits, Luther moves the cutting head



Shawn Lillemo stopped by to meet Luther Taylor



I owe a big thank you to Michael, Jeff and Luther – but also to Flying Club 1, where people with these kind of skills gather and share.

If you need ideas or help with some project, just raise your hand at a meeting. You'll find that somebody knows somebody. It's an amazing group.

Fly safely,
Steve



The Challenger II Project

By Shawn Lillemo

LCDR “Short Round” Abriam at Dahlgren has offered his Challenger II project to the Club if we’ll help him finish it. Shawn Lillemo has stepped up to be the project lead.

Grand Rapids EIS

Donated by Sean Row, it’s a perfect fit!

Propeller

Over the past few weeks, we’ve checked and test-fitted most of the Challenger’s components and systems. This process helped us resolve several unknowns. We discovered that our current prop mounting bolts were from a different hub—so we need the correct bolts—and that our Warp Drive prop measures 62”, even though our re-drive unit only permits a maximum of 60”. After consulting with Mike at the Challenger factory and Warp Drive, we decided to shave the 31” blades down to 30”. Fortunately, this is a straightforward process, and Warp Drive can step in if we need assistance.



Blade length, clearance, and new prop bolts

Technical Support

We were pleased to have Ralph Hoover, an EAA 186 Technical Advisor, visit our hangar to inspect the Challenger. He'll be a great resource for technical questions as we move closer to finishing the build—he also confirmed that Chappy is an invaluable wealth of knowledge! The other EAA builders have already been sharing ideas and suggestions.



Chappy, Ralph Hoover, and Shawn Lillemo



Idea Session

Radiator Progress

I riveted the radiator mount to the root tube, so the radiator is now ready for permanent installation.



Radiator mount

Donated Supplies

The club has been incredibly generous, donating many of the essential parts and supplies we need. Here's an updated inventory:

<i>Item</i>	<i>Donated By</i>
Grand Rapids EIS	Sean Roe
6 Prop Mount Bolts & Crush Plate	Short Round
582 Exhaust 90° Elbow	Club
582 Oil Injector Assembly	Allen Whatley
12V Power Supply (Rectifier)	Club
Rotax High Amp Contactor	Club
Digital Prop Pitch Protractor	Steve
Safety Wire Kit	Steve
Industrial Endoscope	Sean
Hot Box	Sean

<i>Item</i>	<i>Donated By</i>
Slightly Damaged Pilot USA Intercom (PA-200T/A25)	Club
Power Connector, Cable, and Velcro to fix Intercom	Fabian
Radio and Charger	Club
2 Push-to-Talk Buttons	Club
Various Audio Cables	Club
Various Power Wires	Club
AVCOMM Headset	Club
David Clark Headset	Club
2 Type K EGT Sensors	Club
2 Type J CHT Sensors	Club

Still Needed

- Warp Drive hub spacer (See red circle in the picture below)



- Fabric and dope from Short Round for the fuselage
- A roll of 18-gauge Tefzel wire

Engine Inspections

We used a borescope on both the 582 that came with Short Round's kit and the 582 owned by the club. If you're an expert at interpreting endoscope images, get in touch! We'd be happy to share the photos on our Discord build channel for your input.

What's Next

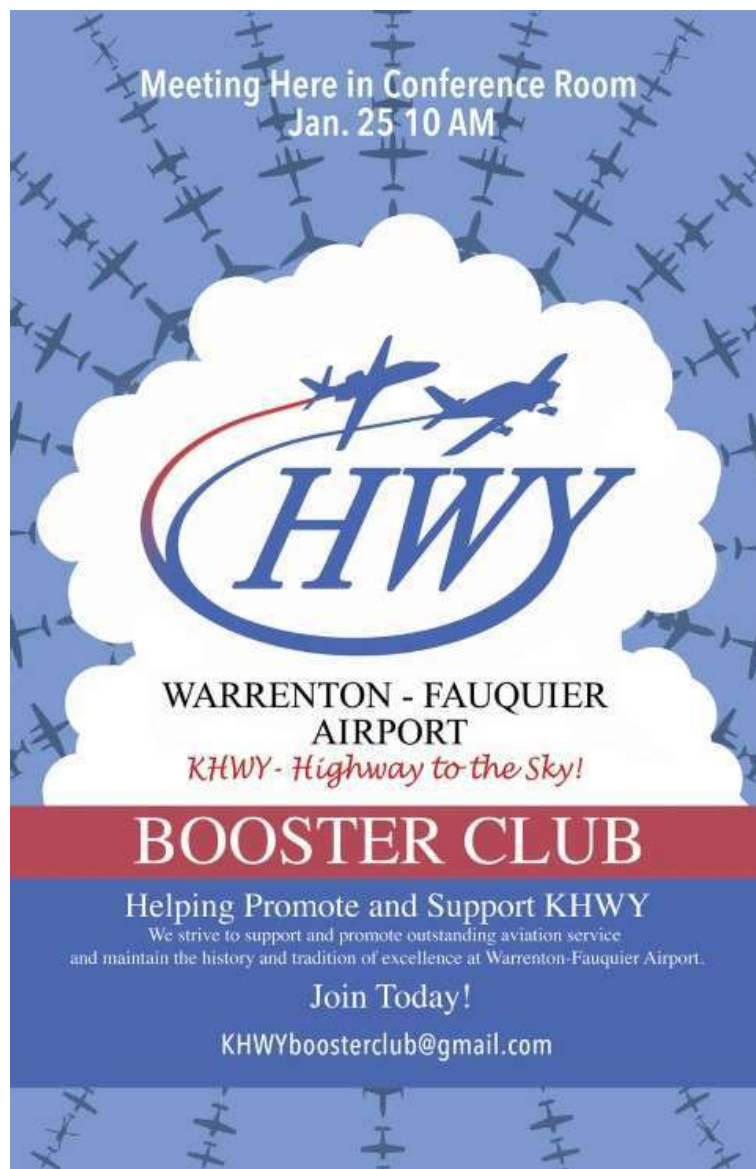
Thanks to everyone involved for their support, advice, and donations. We're excited about the progress and look forward to sharing more updates soon!

- January: Additional wiring for Intercoms, Skin Fuselage, and First Start (if we can agree on an engine)
- February: Mount Wings, Paint and additional EAA Advisor inspections
- March: DAR, Paperwork, and final squawks
- April: PHASE 1 Flight Testing (40 hours)!

Other News

The KHWY Boosters Club is getting started. Their kickoff meeting will be on January 25th.

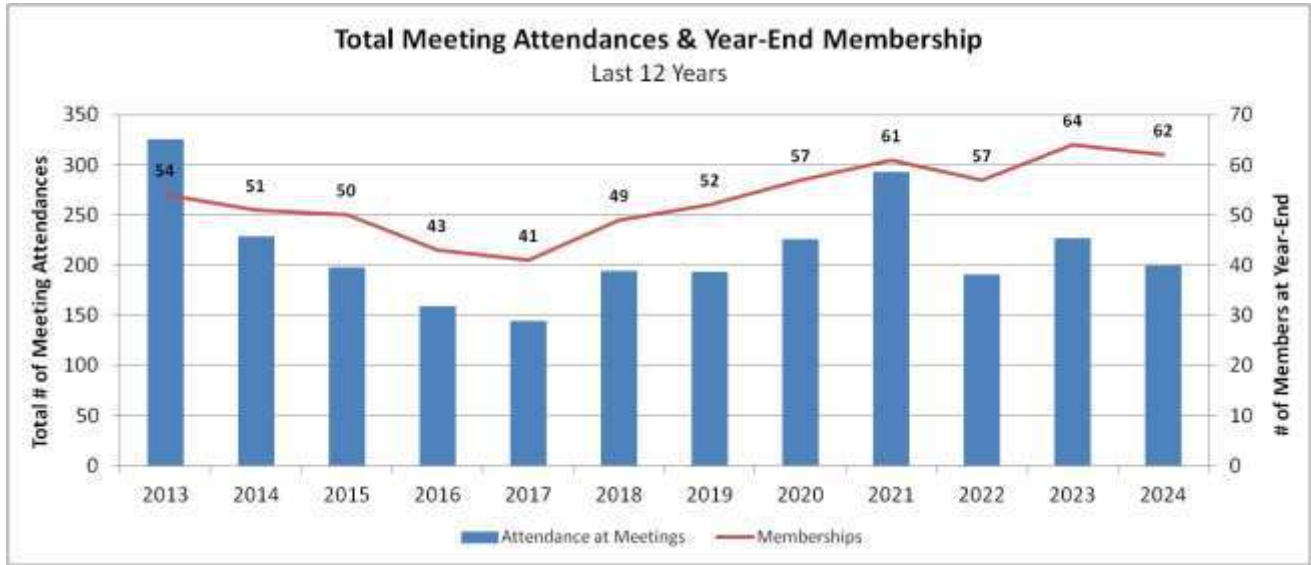
BTW, this poster is courtesy of our own **Jim Heidish**, graphic artist extraordinaire.



Membership & Attendance Statistics

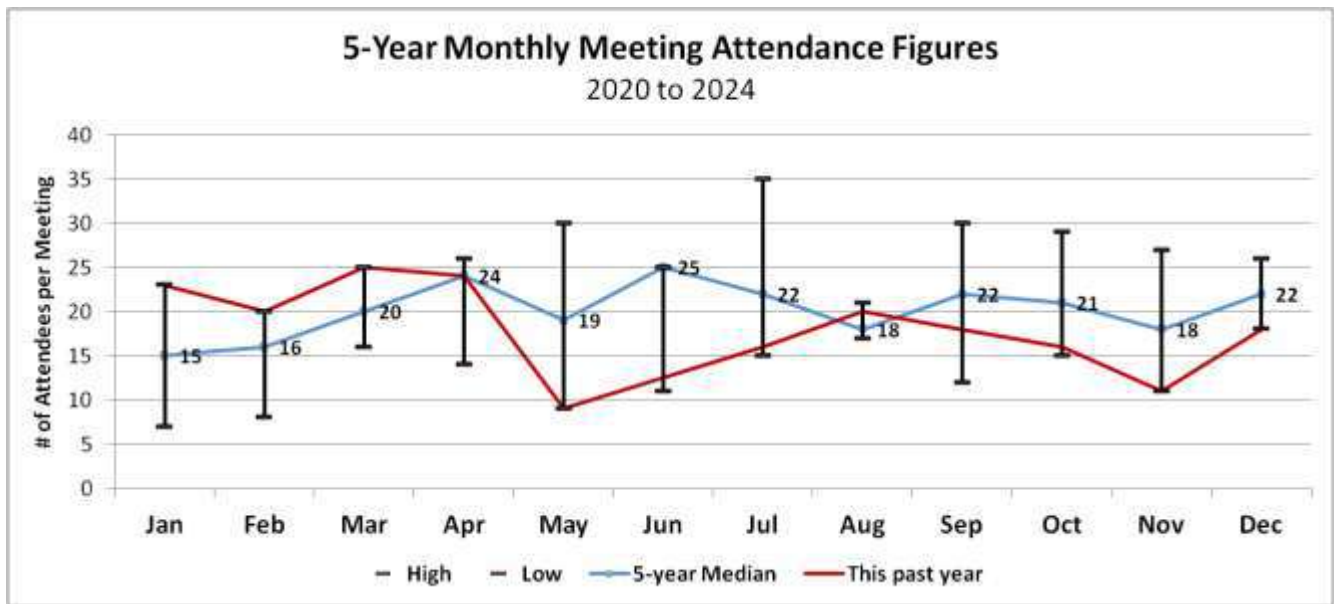
by Steve Beste

Club membership is near a 12-year high. Overall attendance at meetings is down slightly.



Sources: Year-end membership rosters and monthly meeting minutes

When cooks or speakers ask how many people to expect at a meeting, this is where the answer comes from.



Source: Monthly meeting minutes. Thank you past Secretaries **Jim Heidish** and **JJ Campbell!**

Quiz

By Steve Beste

Last month. Congratulations to **Sean Roe** who recognized where the unfinished truck stop is on I-66. It's on the north side between the Markham and Linden exits, [here](#). According to [this story](#) in *Fauquier Now*, VDOT abandoned the project due to NIMBY pressure in 2016.

This month - Confluence. This is an unusual confluence of both rivers and rails in our area. Send me the names of the three rivers.

For extra credit, tell me where the four Norfolk Southern rail lines are going, A, B C, and D.



Looking east

Activities – 2025

Club meetings are generally held on the second Saturday of every month at the [Warrenton-Fauquier Airport](#) (KHWY). Other events are as scheduled below. But please check the home page of the Club [website](#) to make sure there hasn't been a change of time or place.

<i>Date</i>	<i>Event</i>	<i>Location</i>
Saturday, January 11 th 2025, 11am	Fly-in and winter Club meeting	The terminal building at the Warrenton-Fauquier Airport
Saturday, February 8 th , 11am	Fly-in and winter Club meeting	The terminal building at the Warrenton-Fauquier Airport
Saturday, March 8 th , 11am	Fly-in and winter Club meeting	The terminal building at the Warrenton-Fauquier Airport
Saturday, April 12 th , 11am	Fly-in and Club meeting with lunch	The terminal building at the Warrenton-Fauquier Airport
Saturday, May 10 th , 11am	Fly-in and Club meeting with lunch	The terminal building at the Warrenton-Fauquier Airport
Saturday, June 21 st , 8am	Poker Run	Assembly field TBD
Saturday, June 21 st , 11am	Fly-in and Club meeting with lunch	The terminal building at the Warrenton-Fauquier Airport
Saturday, July 12 th , 11am	Fly-in and Club meeting with lunch	The terminal building at the Warrenton-Fauquier Airport
Saturday, August 9 th , 11am	Fly-in and Club meeting with lunch	The terminal building at the Warrenton-Fauquier Airport
Saturday, September 13 th , 11am	Fly-in and Club meeting with lunch	The terminal building at the Warrenton-Fauquier Airport
Saturday, October 11 th , 11am	Fly-in and Club meeting with lunch	The terminal building at the Warrenton-Fauquier Airport
Saturday, October 25 th , 9am	Color Run – Front Royal to Luray	Gather at the Front Royal Airport
Saturday, November 8 th , 11am	Fly-in and Club meeting with lunch	The terminal building at the Warrenton-Fauquier Airport
Saturday, December 6 th , Noon-3pm	Holiday Party	The terminal building at the Warrenton-Fauquier Airport

This Month's Fly-In Destinations

Check out these sources for fly-ins:

- ♦ [EAA Calendar of Events](#),
- ♦ www.socialflight.com,
- ♦ funplacestofly.com
- ♦ [Virginia Department of Aviation Calendar of Events](#).

<i>Date</i>	<i>Event</i>	<i>Location</i>	<i>Distance</i>

Meeting Minutes

When: December 7, 2024. 12:10am to 1:20pm
Where: Warrenton-Fauquier Airport (KHWY)
Presiding: Steve Beste, President
Present: 18 people

Visitors & New Members

- Bob Taylor, newly installed as the president of the KHWY Boosters, introduced himself and the Boosters. He encouraged people to join. Contact him at KHWYboosterclub@gmail.com.

Flying Attendees – None

Routine Business

- Treasurer **Fabian Georges** reported that our bank balance is now \$2,802 thanks to income from the sale of some of the salvage from the Breese.
- He also reports that membership stands at 62.

Challenger Build

Shawn Lillemo reported on the progress of the Challenger build at his house. He put out an appeal for various parts and tools as detailed in the newsletter.

Elections

The following people were elected to Club's Board of Directors. They ran unopposed and were elected unanimously.

- For two-year terms beginning at the end of today's meeting:
 - ♦ Vice President: **Sean Roe**
 - ♦ Treasurer: **Fabian Georges**
- For one-year terms as Director-at-Large:
 - ♦ Pete Bastien
 - ♦ Michael Bishton
 - ♦ Jeff Crider

50-50 Drawing - None

Food

- This was our annual Holiday Party, so it was a pot luck. The food was excellent!



Service Providers

If you're looking for help, Club members have had good experience with these people:

- **PPG instructor** and dealer: Brian Goff, 703-963-7389
 - spin2329@gmail.com
 - <https://www.paraflightnc.com/>
- **Aircraft instructor** - CFI: Pete Bastien, 703-568-5778 (Martinsburg, WV)
- **Aircraft instructor** - light sport and seaplane: Chuck Tippett, 540-905-5091
- **Gyroplane Instructor:** Frank Noe, 443-253-7681 (Frederick, MD)
 - frankcanfly@yahoo.com
 - <http://www.gyromajo.com/>
- **Machinist:** Luther Taylor, 540-222-3927 (Culpeper)
- **Welder:** Luther Taylor, 540-222-3927 (Culpeper)
- **A&P mechanic/IA:** JD Ingram, 513-388-6312
- **Light Sport Condition Inspections, Rotax Certified:** Tim Loehrke, 703-618-4005
- **A&P mechanic specializing in tube & fabric**, based at CJR: Air Knocker Aviation (Abe Makely, Saverio Gambassi) 571-309-7023. airknockeraviation@gmail.com
- **Instructors.** See the [instructors page](#) on the Club website.

Membership Dues Policy

The period of membership is the calendar year: January through December. Renewals can be sent in starting in October for the upcoming year. Members who have not paid their dues by the end of February will be dropped effective March 1 and will not receive the newsletter or the membership roster.

Dues are \$20 per year. But if more than one family member is active in the club, then a family membership covering both of them can be had for \$25. Please:

- Join online at <https://www.flyingclub1.org/join/join.php> or
- Make your check out to **Flying Club 1**
- Mail it to **Fabian Georges**

- ♦ P.O. Box 5322
- ♦ Springfield, VA 22150
- Include a copy of the membership application on the next page (and is available on the club website). That's our way of keeping your contact information up to date.

Membership Application



<i>Join by Mail</i>	<i>Or Join Online</i>
1. Fill out this form 2. Make out a check for \$20 (individual) or \$25 (family) 3. Make it payable to Flying Club 1 4. Send the form and check to: Fabian Georges, Treasurer 7051 Brookfield Plaza, #5322 Springfield, VA 22150	Go to the Club website .

New/Renewal: New Renewal

Type of membership: Individual - \$20 Family - \$25 (when more than one member of the family is active in the club)

First Name: _____ **Last Name:** _____

Name To Go On Your Name Tag: _____

E-mail Address: _____

Cell phone: _____ **Home phone:** _____

Street or PO Box: _____

City: _____ **State:** _____ **Zip:** _____

Emergency Contact Name: _____ **Phone:** _____

Aircraft make and model: _____

N-Number (if any): _____ **Pilot rating(s):** _____

Information from this application will be included in the club’s membership roster which is distributed only to members.

Flying Club 1 General Information

At 50 members or so, we are the center for powered light flying in Northern Virginia, USA. If you are new to light flying, this is the place to see real aircraft and talk to live people. If you're an old hand, this is the place to share your experience and get local information.

Flying Club 1 is a non-profit hobbyist organization. The club aims to promote safe light powered recreational flying by giving support, advice, and encouragement to everyone interested in the sport.

2024 Officers & Directors

President	Steve Beste	President@FlyingClub1.org	703-321-9110
Vice President	Allen Whatley		571-235-6978
Secretary	VACANT		
Treasurer	Fabian Georges	Treasurer@FlyingClub1.org	714-661-8800
Director At Large	Pete Bastien		703-568-5778
Director At Large	Michael Bishton		301-320-9542
Director At Large	Lucy Ooi		585-410-5573

2024 Volunteer Staff

Webmaster	Steve Beste	Webmaster@FlyingClub1.org	703-321-9110
Membership	Fabian Georges	Membership@FlyingClub1.org	714-661-8800
Newsletter	Steve Beste	Editor@FlyingClub1.org	703-321-9110
Club Artist	Jim Heidish		703-524-5265

Dues

- Memberships are for the calendar year. Dues are \$20 for individuals, \$25 for families (when more than one member of the family is active in the Club).

Website

- <http://flyingclub1.org>

Meetings

- Club meetings are generally held on the second Saturday of every month at the [Warrenton-Fauquier Airport](#) (KHWY). But please check the home page of the Club [website](#) to make sure there hasn't been a change of time or place.

Newsletter

- The newsletter is published monthly by email prior to the monthly meetings.
- **Submitting items for the newsletter:** Members and non-members are encouraged to submit items for this newsletter. Send submissions to Editor@FlyingClub1.org by the end of the first weekend of the month.