

FLY PAPER



April 2022

The Flypaper is a monthly publication of

The Fox Valley Aero Club

An Illinois not-for-profit Corporation

P.O. Box 837
St. Charles, IL 60174-0837

www.foxvalleyaero.com

AMA Gold Leader Club



Academy of Model Aeronautics
Charter Club #252

The field comes alive –

The field was busy on March 20th, as evidenced by this webcam image from our website.



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President's Message

Dale Gathman

president@foxvalleyaero.com

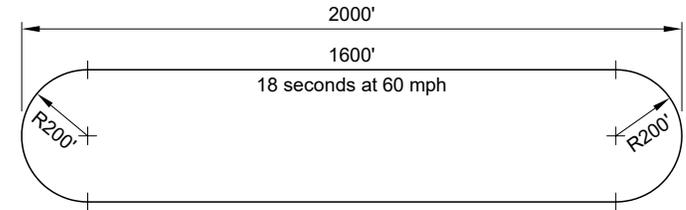
BIGGER is Not Always Better.

As not much has been happening since the last issue, I am writing some thoughts that have been bouncing around in my head for the past few months. I am talking about Aircraft Size. Over the past ten years, I have seen our aircraft get bigger and bigger. 'Back in the day', only a few RC pilots had very large airplanes, and they had to build them from scratch. Now, anyone can buy a giant scale plane that is already 80-90 percent built. Because these planes are much easier to get now, I see more and more pilots getting larger planes than they ever have in the past. It seems also that the aircraft type that has been increasing in size more rapidly over the past few years is the turbine powered jet.

When most of us start flying, we start with a small airplane, with probably around a 40-60-inch wingspan. These 'trainers' fly fairly slow, probably around 30-50 mph. Our field has a total flight envelope length of approximately 2000 feet. So when we are learning, lets say we are flying a 60" wingspan plane at 40 mph. At that speed, it takes about 33 seconds to go from one end of the flight envelope to the other (The west treeline and the east gun range berm are our boundaries). When our trainer planes are at the far limits of the flight envelope, they appear pretty small. The plane appearing small at that range keeps many of us from even flying to the treeline or berm, as we want to keep our plane looking bigger so we do not loose orientation.

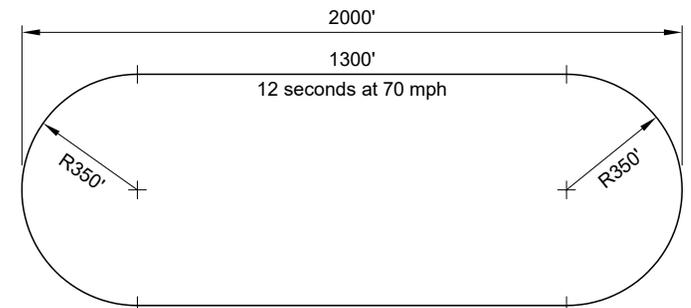
Fast forward a few months or a year, and we graduate to a low wing faster plane, and probably maintain a wingspan of around 60-72 inches. Let's say this new plane can travel at 60 mph. At full

speed, it now only takes us 23 seconds to get from one end of the flight envelope to the other. Our plane still gets pretty small at the far limits of the envelope. Let's also say that it takes us 200 feet at that speed to make the turn at each end of the envelope. That means that we can only fly straight for 1600 feet, which equates to 18 seconds.



As we progress and get more skill, we decide to get a bigger plane, perhaps a 1/4 scale J3 Cub. This plane still flies slow, back to the 40-50 mph speed, but because it is bigger, we can fly it farther away from us and still maintain orientation. We now fly it right out to the ends of the flight envelope because it does not appear so small when we get it out that far.

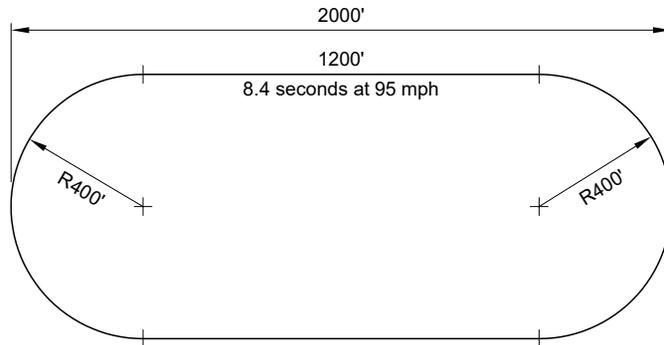
After flying this plane a while, we get bored and decide that we want a plane that will go faster. So, we get a 1/5 scale warbird with perhaps a 67-inch wingspan. This plane may be capable of going 70 mph or more. At 70 mph, we are back to a smaller plane that now only takes 19 seconds to cover the flight envelope. Because this plane is faster, it takes 350 feet to make our turn at each end of the envelope. This gives us only 1300 feet of straight flight which equates to 12 seconds.



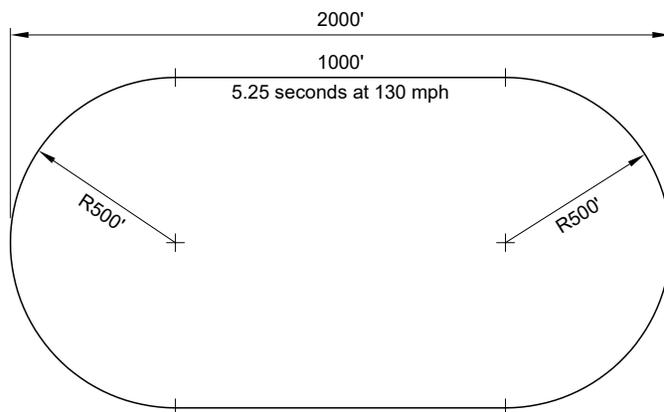
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Next, we get a giant scale warbird, once again easier to see, and we overpower it so that it goes 95 mph. Cool right? Yes, but now we cover the flight envelope in 14 seconds. We now need more distance to make our turns, let's say 400 feet. That gives us only 1200 feet of straight flight, which equates to 8.4 seconds.

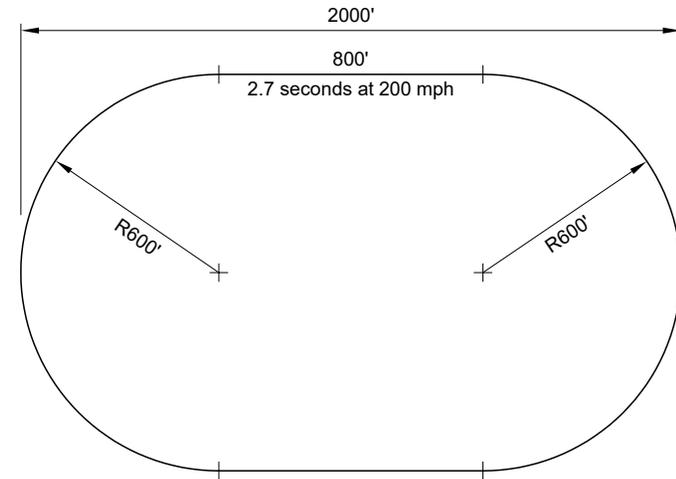


Okay, so now we get the desire to get a turbine jet. We get a trainer jet and it has a 65" wingspan. Top speed on this bird is 130 mph. When flying at top speed, this jet gets small fast, and will cover the flight envelope in 10.5 seconds. Because of the high speed, we now need 500 feet to turn. This means we only have 1000 feet of straight flight before needing to turn. This equates to 5.25 seconds.



Many of the largest jets allow pilots to fly at up to 200 mph and the size allows them to fly well past our flight boundaries and still easily see the plane and maintain orientation. At that speed, it covers the flight envelope in 6.8

seconds. Let's say the turns now take 600 feet at both ends. This pilot only has 800 feet of straight flight before needing to turn. At that speed, this equates to 2.7 seconds of straight flight. This pilot is almost in a perpetual turn in order to stay within our flight envelope. To make sure that this pilot does not cross into the gun range, he will basically have to start his turn at mid field.



The above figures are approximated, used to make a point. As we get bigger and faster planes, you can see why it is hard for pilots to keep their planes from overflying our flight boundaries. If you have to turn every three seconds, what fun is that. The keys to staying in the boundaries are simple:

- Fly smaller, slower planes.
- Even if you are flying a giant scale plane, they can many times be flown slower than you fly them.
- Leave yourself plenty of length to make your turn so the plane does not cross the flight boundaries.
- Keep calm and enjoy the flight. Have a spotter remind you when to start your turn.
- Evaluate every one of your flights. If you continually cross over the flight boundaries, consider making some changes such as those listed above.
- Turbine pilots – learn the stall speed on your planes and make your turn to final with just a little more

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speed than the stall speed. Many of the boundary overflights that I see are turbine pilots who do not know their planes well enough to slow them down when making the turn to final. Because they are still going very fast, they extend out past the boundary in order to have enough distance to slow down for the landing once they get lined up.

Pilots, it is not hard to stay within the boundaries. If you know you have a problem doing so, fly with a spotter that can talk you through your flight. Our flight boundaries (the east gun range berm and the west treeline) are **NON-NEGOTIABLE BOUNDARIES**, and it is **mandatory that you do not overfly them**. You may have noticed the construction taking place to the east of the 911 center. During this construction, which will be going on for a few years, there is a good chance that City of St. Charles employees and officials will be in the area fairly often. We have to make sure that we do not ever overfly our boundaries. For the sake of the club and our great field, take responsibility for your flights, and let's help each other stay within these boundaries. The problem of boundary overflight is not going away, and we cannot look the other way any longer. We as a club have to correct this problem.

Treeline Berm Orientation Day – On Saturday, May 7 from 9:00 – 1:00 we will be having our Spring Treeline/Berm Orientation Day. This is a great opportunity for you to let us help you learn to fly within our flight boundaries. We will have spotters stationed at the gun range berm and at the treeline. They will have two-way radios and will communicate to the flightline your approximate distance to the boundaries and when you are getting close to the boundary. They can also recommend to you when to turn based on your speed. I strongly request that every active pilot come out and take advantage of this opportunity if at all possible. Bring your large and fast planes and learn what they look like when you are almost to the berm. This can help significantly when you are trying to determine if your plane is short, at or over the boundary. If you fly turbines, bring one of those rather than a slower plane. The turbine pilots have the hardest time staying within the boundaries, and we can help you learn to do so.

I hope to see you at the April Member Meeting on the 14th, and please bring your new planes and projects to show to the group.

Dale

Secretary's Report

Armin Weber

secretary@foxvalleyaero.com

Fox Valley Aero Club
Member Meeting Minutes
 March 10, 2022 at
 St. Charles Township Hall



1. **Welcome Members and Guests** – Dale Gathman.
 Dale Gathman called the meeting to order at 7:45pm.
2. **Approval of Member Meeting Minutes from February 10, 2022** – Armin Weber.
 Dale Gathman asked for a motion to accept the February Member Meeting minutes. Motion made by Rob Sampson, second by Steve Haas, all accepted.
3. **Treasurer's Report** – Dale Gathman for Joe Pedone.
 Dale Gathman reported 34 members and 10 junior members have not yet paid their dues for 2022. Deadline to pay dues was 3/1. Late paying regular members will be assessed a twenty-five-dollar late fee. Swap income was like previous years. We have reserved the Hall for the next two years; the rate will not change. Recent expenses include Swap Meet hall rental, Golf Carts for the WCWC event & 2022 Field Lease. The mowing contract with Sanchez Lawn Service will be renewed. Dale Gathman asked for a motion to accept the Treasurer's Report: Scott Schilling moved, second by Steve Haas, all approved.
4. **Safety Chairman's Report** – Jim Thompson.
 Dale Gathman presented the following rules changes:
 #10 - No taxi of planes in the pit area. Plane movement in the pit area must be restrained by the pilot or spotter.

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#22 No smoking or vaping is allowed south of the gravel road/parking lot.

#23 Accidents: Any pilot that has a flight accident north of the lines made by the flight station tennis nets and the chain link safety fences or east of the gun range berm chain link fence must complete a 'Pilot Accident Report'. These report forms are available at the field or on our website. The report must be submitted to both the FVAC Safety Chairman and the FVAC President within 24 hours of the accident.

#7 Wording change: (No running of engines on the grass area directly in front of the pavilion).

5. **Government Relations Chairman's Report** – Dale Gathman for Tom Spriet.
No report
6. **Membership Chairman's Report** – Dave Cotton.
New Members: Tracy Wienrich just joined tonight. Welcome to the club Tracy. Member count is now at 220.
7. **Field Chairman's Report** – Mark Knoppkie.
 - a. Mowing contract with Sanchez is being renewed.
 - b. Field workday will change to April 23, rain date April 24.
 - c. Mark Knoppkie asked for 10 volunteers to help with Mowing. Names and schedule might be listed on the website.
 - d. Mark Knoppkie asked for 4-6 volunteers on April 9 to help clean loose paint from the pavilion with a power washer.
 - e. Members mentioned the grass runway is a little rough. The grass runway will be rolled during field maintenance.
8. **Flypaper Editor's Report** – Dale Gathman for Doug Swanson.
Doug Swanson produced an abbreviated newsletter. We are still searching for a new *FlyPaper* Editor.
9. **Public Relations Chairman's Report** – Tom Flint.
Tom Flint reported that he will be ordering Tee Shirts by April 1 to avoid a price increase. WCWC shirts will be available for \$25. Watch the WCWC website for more Info.
10. **Swap Meet Report** – John 'JT' Turner.

John Turner reported: The swap brought in about \$2000.00. We signed a two-year agreement with the fair ground to lock in the hall and the price. Next Swap 2/18/2023. John Turner thanked all the volunteers who helped. We had a very successful Club table which brought in over \$1000.00 of the total income. Thanks to Kevin Hersey and crew for organizing the club table.

Goals for 2023 swap:

- Attract more shoppers.
- Charge a premium for wall tables and end cap tables. Sellers will be able to choose tables directly from the website.

11. **Cookout Report** – Dale Gathman/Debbie Howe.
Dale Gathman reported the Cookout date is changed from May 14 to April 30.
12. **Windy City Warbirds & Classics Report** – John Fischer.
John Fischer reported the Windy City Warbirds and Classics registration is open. \$50 online \$60 at the event. All event information is available at www.WindyCityWarbirds.com. For information about the Warbirds and Classics alliance, visit www.warbirdsandclassics.com.
13. **Festival of Flight Report** – Jim Thompson.
FVAC will be doing the cooking like last year.
The event is open to all aircraft.
The Honor Guard will attend again.
We are working with a car club to display 10-15 exotic and/or classic cars.

Show & Tell

Jeff Peca mentioned the latest copy of AMA Magazine has a very good article on LIPO batteries.

Jim Thompson reminded: Now is the time to go over our airplanes and batteries.

Mark Beezhold – Showed his Bristol M1C Scout from Seagull Models, purchased from Gator RC.

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The 71" model is 1/4 scale with a 20CC RCGF Gasoline engine and Aces of Iron pilot.

Mark also showed a Custom Wing Bag from FlyingRC.net.



Mark Beezhold



John Turner – Showed his Extreme Flight Laser.

The 60" model is electric powered with Savox servos, Talon 90 Amp speed control, and 6S battery.



John Turner



Mark Knoppkie – shared his experience with iX20 battery that required replacement. Also showed his replacement 14Ch receiver from Spektrum. He encouraged members to join the Facebook groups to get user experiences.

Motion to adjourn by Tom Flint, second by Mark Beezhold, all approved.

Meeting was adjourned by Dale Gathman at 8:35.

Minutes submitted by Armin Weber – Secretary.

Your
Picture
Here

(Editor position
is still open)

From the Editor

Doug Swanson
newsletter@
foxvalleyaero.com

Hey, folks.

April is here—it still
feels like March.

Acceptable flight weather (to me) has been spotty. I hope things will turn in the next few weeks. I still have yet to make my first flights of the year.

There's a lot of new products coming to market lately that sure have piqued my interest. One is the new Freewing B-2 Spirit Bomber. Anyone pulled the trigger yet? I can't wait to see one in person.

I hope to see you at the field soon.

Doug

**Freewing B-2 Spirit Bomber Twin
70mm EDF Jet - PNP FJ31711P**



The viewpoints in this newsletter are solely those of the individual authors. They may not necessarily represent those of the Editor, Officers, Board, or Membership of the Fox Valley Aero Club.

Treasurer's Report

Joe Pedone treasurer@foxvalleyaero.com

At this point in April, I was hoping we'd benefit from some warmer days to enjoy some better flying weather. But as I sit writing this, I'm watching rain mixed with snow falling. Well, you can't fight mother nature, so for me it's back to the workshop for a while longer. I have plenty of projects to work on that I expected to complete over the winter, so more time in the shop is helpful. But hoping things improve for both some flying time, and to get a good start on our upcoming field workdays coming up in April.

From the Treasury standpoint, our Club checkbook is in good shape up to this point as we've had few expenses, and an inflow of funds from annual member dues collected. Over the past month, besides our regular utility payments, we've started to pay some expenses towards the 2022 Windy City Warbirds and Classics event. We've made a down-payment on the Pilot Dinner, and have also paid-in-full the cost for our new and awesome "Aircraft of Aces" WCWC T-shirts, which you will see soon! Compliments to Tom Flint on another great T-Shirt design.

Thanks again to those members that have paid their dues and retained their flying privileges for 2022. If you haven't yet paid your dues, I will be accepting check or cash payments at the upcoming Member Meeting on April 14th. As a reminder, since we are past the 3/1 dues deadline, Adult dues are now \$175. Members with unpaid dues for the upcoming season will be denied use of the field until their dues are paid in full. You can still pay anytime using PayPal for those that have a PayPal account or wish to establish one. You can simply paste the link below into your browser:

<https://www.paypal.me/fvacdues>



If you wish to mail your dues payment, please send by check to the club PO Box, which is Fox Valley Aero Club, P.O. Box 837, St. Charles, IL 60174

Sincerely,
Joe Pedone



*date
changes!*

January 1	Fun-Fly — Frozen Fingers	10:00 am FVAC Field
January 11	FVAC Member Meeting	7:00 Board Zoom
January 13	FVAC Member Meeting	7:30 Member at Township Hall
February 10	FVAC Member Meeting	6:30 Board, 7:30 Member at Township Hall
February 19	FVAC Annual Swap Meet	8:30 — 4:00 - Kane County Fairgrounds
March 10	FVAC Member Meeting	6:30 Board, 7:30 Member at Township Hall
April 14	FVAC Member Meeting	6:30 Board, 7:30 Member at Township Hall
April 23	Field Workday	9:00 — FVAC Field
April 30	FVAC Cookout - Awards and Raffle	12:00 — FVAC Field
May 7	Tree Line/Berm Orientation Day	9:00 — 1:00 — FVAC Field
May 12	FVAC Member Meeting	6:30 Board, 7:30 Member at Township Hall
May 22	Fun-Fly — #1 —	11:00 — 1:00 — FVAC Field
May 30	St. Charles Memorial Day Parade	TBD
June 9	FVAC Member Meeting	6:30 Board, 7:30 Member at FVAC Field
June 16-18	Windy City Warbirds & Classics	FVAC Field
July 2	Electric Only — AMA Sanctioned	10:00 — 2:00 Electric Only — FVAC Field
July 7	FVAC Member Meeting	6:30 Board, 7:30 Member at FVAC Field
July 10	Fun-Fly — #2 —	11:00 — 1:00 — FVAC Field
August 6	Retro Fly	9:00 — 3:00 - FVAC Field
August 11	FVAC Member Meeting	6:30 Board, 7:30 Member at FVAC Field
August 13	Family Fly Day	9:00 — 1:00 - FVAC Field
August 27	Cub Fly — AMA Sanctioned	9:00 — 1:00 Cubs Only - FVAC Field
August 27	Night Fly — AMA Sanctioned	6:00 - Midnight - FVAC Field
Sept 8	FVAC Member Meeting	6:30 Board, 7:30 Member at Township Hall
Sept 10	Festival of Flight	9:00 — 5:00 - FVAC Field
Sept 17	FVAC Tailgate Swap Meet - Sanctioned	9:00-1:00 — FVAC Field
Sept 18	Fun-Fly — #3 —	11:00 — 1:00 — FVAC Field
October 8	Turkey Fry	12:00 — FVAC Field
October 13	FVAC Member Meeting	6:30 Board, 7:30 Member at Township Hall
November 10	FVAC Member Meeting	6:30 Board, 7:30 Member at Township Hall
December 3	Annual Christmas Party	6:00 Hilton Garden Inn — St. Charles
December 8	Rookies Christmas Party	7:00 Rookies Sports Bar & Grill — St. Charles

Fox Valley Aero Club Flight Boundary Map

Rotary-wing
Aircraft Only
Area

Forest
Preserve
Property

Western Boundary - First Tree Line

Flight Area (unshaded, red boundary)

Eastern Boundary - Base of
Police Gun Range Berm

Police
Gun Range

9-1-1
Dispatch
Center

Red shaded area =
No-Fly Zone

FVAC NEW MEMBERSHIP FORM

New Member Assessment Fee: \$300.00 (For new memberships only. Does not include dues.)

- Dues for Regular Members (19 years and over) \$150.00 per Member
- Dues for Junior Members (18 years and under) \$ 25.00 per Member
- Family Membership \$150.00 1st Member
(\$25 for each additional family member with an AMA card, either a spouse or a child under 19 years old.)

PLEASE PRINT

Your Full Name:

AMA Number:

Birthdate:

Dues Amount:

Include me on the club email list.

_____	_____	_____	\$ _____	<input type="checkbox"/>
_____	_____	_____	\$ _____	<input type="checkbox"/>
_____	_____	_____	\$ _____	<input type="checkbox"/>

Your Complete Mailing Address:

Please list the R/C channel(s) you use:

Your Phone Number/s:

Home:

Your Work Mailing Address:

Work:

Cell:

What is Your Occupation: (Please provide details)

Your E-mail Address: _____

Total Payment Enclosed:

\$ _____



Complete and mail this form to:

**FOX VALLEY AERO CLUB
 P.O. BOX 837
 ST. CHARLES, IL 60174-0837**



**Make checks payable to:
 "Fox Valley Aero Club"**

Signature _____

Date _____