

THE CARRIER WAVE



PHANTOM FLYERS R/C CLUB



AMA #393 SAINT CHARLES, MO

February 2023

Newsletter of the Phantom Flyers R/C Club

<http://phantomflyersrc.com>

CLUB OFFICERS

Contact Number

President - Ed White	(636) 219-2255
Vice President - Don Grzina	(636) 233-0193
Secretary - Mitch Galatioto	(636) 734-6322
Treasure - Jose' Espinosa	(636) 947-6067
Safety Officer - Dave Evans	(636) 448-4800
Field Manager - Don Grzina	(636) 233-0193
Chief Flight Instructor - TBD	
Event Coordinator - Dan Abel	(314) 707-0138

Send Membership Renewals to:

Ed White

10 Wolf Ridge Ct

St Charles, MO 63303

Board of Directors:

Work

Home

Ed White	Retired	(636) 219-2255
Dan Sundman	(314) 749-4029	(314) 749-4029
Mitch Galatioto	Retired	(636) 734-6322
Dave Evans	Retired	(636) 448-4800

Phantom Flyers R/C Club Meeting Minutes - 16 January 2023

Attendees: 12 club members were in attendance on the Skype meeting. Some with no names, others that looked alien-like (not that there is anything wrong with Aliens!), but non-the-less, they were there, so thanks for attending! People I recorded were: Dave Evans, Dan Sundman, Ed White, Gloria aka "Kevin" Cox, Harold Weaver, Jim West, Mike Wallis, Mitch Galatioto, Dan Abel, Paul White, and Bill Reape.

President's Opening Remarks: Ed White went "Old School" with a view graph presentation introducing the new officers.

Technical Session: No presentation this month.

Secretary's Report: The November meeting minutes were approved as written. There was no December business meeting. Ed White announced that I am the new Secretary, but requested you continue to send membership renewals to him for the 2023 season.

Treasurer's Report: Jose was unable to attend, so no report was provided. We will catch up with him next month.

Activities Report: Dan Abel is working the 2023 Events Calendar, but here are the items discussed at length. **January**

1st fun fly - The event was a huge success with 15 people attending and mother nature cooperating with 58 degree temperatures and even show-cased 2 generations of Abels as Dan's parents were in attendance! **Swap Meet** - Based on other area events, the August time frame seems to be best as long as we stay away from the 2nd Saturday which is Model Aviation Day. Mitch Galatioto will check hall availability. A contest director for the event is needed and lots and lots of club participation is required to prepare for and run the event.

Precision Aerobatics Competition - Vince Bortone, NSRCA VP, has requested clubs review their competition dates and alter them to allow for smooth transition of scoring equipment from location to location. He provided potential dates for our club contest and each date was discussed with its' pros and con's. The club is currently thinking June 24/25 as there is no other Division 5 completion contest and the weather tends to be a little cooler, but no final decision has been made.

Soaring Contests - Several glider contests will be added to the Event Calendar. Dan will work on dates, contest directors, and rules to ensure the event can be more inclusive of a larger number of club members.

Chief Flight Instructor (CFI): The CFI position is open if anyone would like to volunteer. There are currently 2 people in the training program.

Field Manager: Ed reported on behalf of Don Grzina that the runway repairs performed in 2022 seem to be holding up well and survived the December cold weather, however moles are taking over our grass areas. Ed looked into possible solutions with the Missouri Department of Agriculture, but no good solution was found. We will hold a work party this year to attempt to oust our trespassers! The position of Mole-A-Nator is available!

Safety Officer's Report: Mitch Galatioto suggested we include a Safety Rule in each Carrier Wave as a gentle reminder of rules we must abide by per our By-Laws and FAA LOA but may have become a little complacent on or forgot about throughout the years.

Old Business: None.

New Business: None.

Meeting adjourned at some point, but new Secretary forgot to note the time!

Respectfully submitted,

Mitch Galatioto, 2023 Secretary, Club Member, Board of Directors, Mowing Crew and YES, I actually fly too!

https://www.faa.gov/uas/recreational_fliers/knowledge_test_updates/

<https://dronetrust.com/faq-trust/>

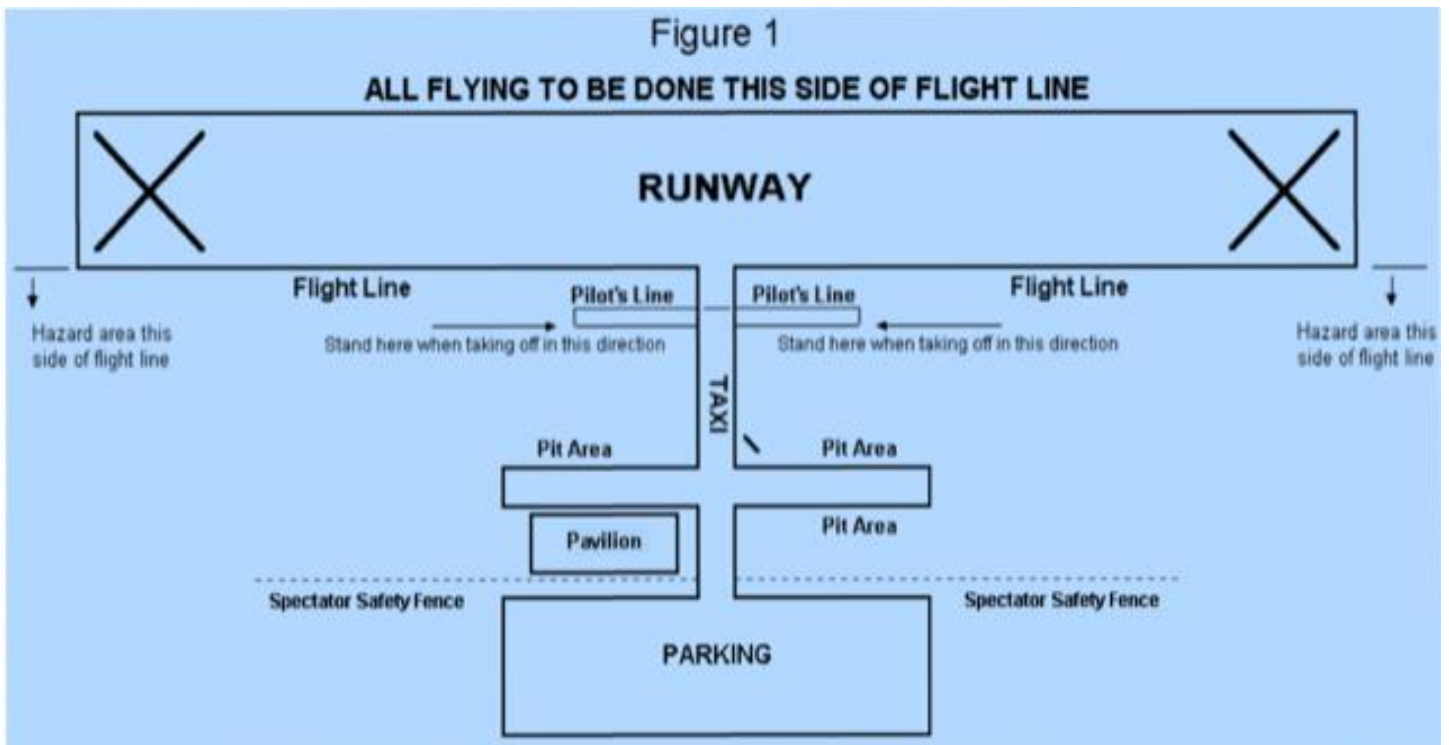
Safety Rules to Fly-By

(submitted by Mitch Galatioto)

A few excerpts from our Safety Rules. Always good to read through them on occasion to ensure we are all following them. If you need an electronic copy of them, please ask any officer. Thanks for keeping our field safe!

10. No flying of any sort shall be performed from, into or over the hazard area. The hazard area includes the pit area, pilot's line, pavilion, spectator, and parking areas. (See Figure 1).

13. All aircraft must be physically restrained when the engine is running or electric motor power is connected while the aircraft is in the pit area or on the taxiway behind the pilot's line. Taxiing onto the runway is allowed forward of the pilot's line. When retrieving an aircraft from the runway, the engine/electric motor shall be stopped prior to crossing the pilot's line when returning to the pit area.



Who is the Tall Gentleman on the Left?



Great design and build thread can be found on RCUniverse.

<https://www.rcuniverse.com/forum/rc-jets-120/11691106-sukhoi-su-17-m4-fitter-1-6-scale-project.html>

(submitted by Ed White)

GSLMA Report

supplied by Harold Weaver

GSLMA Meeting – Tuesday, February 7, 2023

Location: Kirkwood Community Center

Notes by: Jeffrey C. Young

Meeting called to order: 7:05pm

Roll Call – St. Louis Rocketry, Aero Pilots, Lafayette Escadrille, Phantom Flyers, and Whirlybirds present.

January minutes – none, no meeting.

Treasures Report:

None

Buder Park Permits:

None

Old Business:

- Fred talked with McConnel – still on list and will get complete is early spring. McConnel said they will re-bid as prices may have changed.
- FRIA for Buder Park has been submitted to AMA. No status currently.
- Event list has been posted to Facebook, posted at Buder, and sent to SLCPD. A few events conflict with SLCPD events which are in the process of being worked out.

New Business:

- August 12 National Fun Fly at Buder Park – motion to donate to charity, second, pass, none opposed. Charity organization – choose local – 50/50 raffle for Wings of Hope. Reserve soccer area for National Fun Fly. Fred to see what the fees may be.
- Purchase chairs for RC Area – motion, second, pass, none opposed. Not to exceed \$250.00.
- Ask SLCPD if the bottleneck at the stream can be cleared via equipment. If not, plan workday in March 25 – Saturday.
- Add paver to current pilot stations in RC area to make them larger. Motion to purchase pavers and misc items for installation not to exceed \$300.00. Second, pass, none opposed.

Meeting closed 7:52pm

2M Acuity Wing - Fuselage Alignment

February 2023 Tech Session - Don Grzina

A dead stick (attempted) landing resulted in serious damage to the fuselage of my 2M AJ Aircraft Acuity pattern plane. The wing tube sleeve locating internal structure and side panels were destroyed. Fortunately, the wings survived with minimal damage. Covid pandemic supplier issues left me with little choice but to try to repair the damaged fuselage.

The wing tube sleeve location on the left side was gone, but still intact on the right-hand side. The first hurdle was to determine how to relocate the sleeve on the left side. I made a



transfer template from 1/4" MDF panel with a close tolerance hole to match the wing tube. Basswood strips were glued to register the panel relative to the canopy sill, as shown in the photo below. Matching basswood strips were then glued on the opposite surface (near side in photo), even with the initial canopy sill registration strips.



The transfer template was then used to rough in new interior structure to the left-side fuselage with the wing tube sleeve in approximately the correct location. Plywood rings were fabricated with close tolerance holes to the wing tube sleeve outer diameter, and the left structure hole opened slightly to allow refinement of that side of the sleeve. Other damaged internal structure was either repaired or replaced as needed.



The next task was to assure the wing tube was aligned to the rest of the aircraft. A self-leveling cross projection laser on a camera tripod provided my reference for fuselage setup. The plane was fixed to a building jig and shimmed to bring the vertical fin hinge line to match the laser vertical reference, and cross-checked the horizontal stabilizer tube to the horizontal laser reference. I made aluminum inserts for the wing and stab tubes to improve positioning relative to the laser reference lines. Craft plywood panels with close tolerance holes to the wing tube rested on vertical stanchions fixed to the build jig, fixing the wing tube to remain level to the horizontal laser line but free to move fore and aft. The digital inclinometer I use for setting incidence confirmed the tube was level when positioned to comply with the horizontal laser line.



The last condition was to set the wing tube square to the fuselage centerline. A wire cable with ball end was bolted to the tail wheel mount, and a sliding pointer fabricated to mark distance along the wire. The wing tube was centered to the fuselage, measuring equally left and right from the fuselage side to the wing tube end within 1/64". The distance to the right tube insert was marked with the sliding cable pointer, then the distance on the left was compared. Adjustment of the left wing tube end fore or aft as needed to remove half the difference (visually). Any adjustment on the left changed the distance on the right (the tube was pivoting about the right-side fuselage), so multiple iterations of the measuring process were required before equal distances were obtained.

Equal distances from the fixed point on the aft fuselage centerline assured the tube was square to the aircraft centerline. The wing tube plywood supports were clamped to the stanchions to maintain the tube's position. Wing tube level was check to the laser reference. When all conditions were satisfied, the wing tube sleeve was epoxied in place with the close tolerance ply rings.

At this point, for better or worse, the wing was fixed. Remaining repairs to the fuselage were completed. Wing incidence was reestablished to AJ Aircraft specs. Four clicks of right aileron trim were removed from the transmitter prior to post-repair first flight. Only two clicks of right aileron trim were required during the first flight. I call that a win!

Thanks Don!

Members Projects

Work has resumed on my (Editor) Douglas D-558 Skystreak. The goal is to attempt a maiden at the end of this month (February). I actually used latex house paint via an Avanti compressorless airsprayer and an airbrush on the fuselage. Looks a bit rough more surface prep would have helped, but if it flies I will redo it. The big takeaway is that it is spouse friendly, she didn't even know I was painting (no strong smells). It isn't as dependent on outside temps and humidity.

Project rating- overweight, really behind schedule but atleast it is under budget!!



Events

Event Coordinator-Dan Abel

While I was working on the club calendar of events I was looking at other clubs in the general area and at their event schedule. I saw that Midwest Air Wing (<http://midwestairwingrc.com>) has an event on their schedule: 50mm and 70mm EDF Pylon Racing. I wrote to them asking about this event. They are planning to host 5 events and total the seasons score for an overall winner. Below are the current rules and links to plans for the models.

DRAFT - 50mm and 70mm Pylon Racer Rules UPDATED 2/15/2023 - DRAFT

WHEN READING THROUGH THE RULES PLEASE NOTICE THE FOLLOWING

1. Airplane specifications are intended to keep the price low and the fun high.
2. The AMA has not finalized the rules on these two pylon racing categories.
3. Respect for the airplanes, pilots, and spectators is paramount.
4. 50mm pylon racer airframe is to be built to FF-Viper-50 plans <https://www.rcfoamfighters.net/ff-viper-50>
5. 70mm pylon racer airframe is to be built to FF-Viper-70 plans <https://www.rcfoamfighters.net/ff-viper-70>
6. Note the minimum weight requirements for each class.
7. Planes will race against each other in the same mm motor class.
8. The course is 300' long.
9. **Pylons will be placed as markers only - competitors will not be racing around the actual pylons to minimize crashes.**
10. Airplanes will need to complete 4 laps under their own power.
11. **The race will utilize a racing start, that is, competitors will gather in the air and cannot cross a start line before a 10 second countdown has completed. Crossing the start line before the countdown finishes results in a disqualification for that round and 0 points.**

RULES 50mm

Wingspan: 23 Inches (58.42cm) +/- 10mm

Length: 24.77 Inches (69.92cm) +/- 10mm

AUW: Not Less Than 18.0 Ounces (510.3gm).

Airplane to be built with either foamboard, Depron or Fan Fold. The use of Depron or Fan Fold will result in lighter model and may require added weight to reach 18.0 ounces (510.3gm).

Motor: "Powerfun EDF 50mm 11 Blades Ducted Fan with RC Brushless Motor 4300KV as offered by Amazon at https://www.amazon.com/dp/B0756DZJZT/ref=as_sl_pc_qf_sp_asin_til?tag=rcfoamfighter-20&linkCode=w00&linkId=7dec18f529fccf7ca8c7d6cbf2178743&creativeASIN=B0756DZJZT&th=1 or at any other vendor offering the identical product"

Battery: 4S (2200mah, 60C or better recommended)

RULES 70mm

Wingspan: 29 Inches (73.66cm) +/- 10mm

Length: 31.50 Inches (80.00cm) +/- 10mm

AUW: Not less than 34.0 Ounces (963.9gm)

Airplane to be built with either foamboard, Depron or Fan Fold. The use of Depron or Fan Fold will result in lighter model and may require added weight to reach 34.0 ounces (963.9gm).

Motor: "Powerfun EDF 70mm 11 Blades Ducted Fan with RC Brushless Motor 3400KV Balance Tested for EDF 4S as offered by Amazon at https://www.amazon.com/dp/B07CVQZGSC/ref=as_sl_pc_qf_sp_asin_til?tag=rcfoamfighter-20&linkCode=w00&linkId=285e083156da0a66837a354bd441664e&creativeASIN=B07CVQZGSC or at any other vendor offering the identical product"

Battery: 4S (3,300 to 4,000mah, 60C or better recommended)



Don't forget to renew your membership!!

https://www.phantomflyersrc.com/wp-content/uploads/2021/03/phantomflyers_membershipform-fillable.pdf



<http://phantomflyersrc.com/>

<https://www.facebook.com/Phantom-Flyers-RC-Club-139791882811519/>

Check there for the back issues of the Carrier Wave Newsletter, mowing schedule, event calendar and club roster/contact information (handy for mowing).

Articles, pictures and tech notes for publishing in the Carrier Wave are always appreciated. Let us know what you are building, repairing or flying!

Send them to:

kevcx@charter.net