

# **THE CARRIER WAVE**



## **PHANTOM FLYERS R/C CLUB**



**AMA #393 SAINT CHARLES, MO**

**December 2021**

Newsletter of the Phantom Flyers R/C Club

<http://phantomflyersrc.com>

### **CLUB OFFICERS**

### **Contact Number**

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President - Bill Ahrens	(314) 913-3819
Vice President - Dan Dierking	(314) 406-4949
Secretary - Ed White	(636) 219-2255
Treasure - Jose' Espinosa	(636) 947-6067
Safety Officer - Dave Evans	(636) 448-4800
Field Manager - Don Grzina	(636) 233-0193
Chief Flight Instructor - TBD	
Activities Chairperson - Ed White	

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### **Send Membership Renewals to:**

Ed White

10 Wolf Ridge Ct

St Charles, MO 63303

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### **Board of Directors:**

### **Work**

### **Home**

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

## Minutes of the Phantom Flyers RC Club meeting on 15 November 2021

The November club meeting was held via Zoom and opened at 7:00 PM. Secretary Ed White chaired the meeting. Seven club members were present.

Tech Session: Dan Abel presented his suggestions for a couple new ideas to increase interest and participation in the club and club meetings. One suggestion is for a two-minute tip where a club member would present a tip on some subject and limit the tip to two minutes. Anyone can send an email to [2\\_minute\\_tip@phantomflyersrc.com](mailto:2_minute_tip@phantomflyersrc.com) to either offer to present a tip or request a subject for a future tip.

Secretary's Report - A motion was made and passed to accept the minutes of the October meeting as published in the November Carrier Wave.

Treasurer's Report - The club is still solvent. The full Treasurer's report is available to any club member upon request. Membership renewals are due now. Please get them in.

Safety Officer's Report - Safety Officer Dave Evans could not attend. No safety issues were raised.

Field Manager's Report - The grass has (probably) quit growing. A small committee was formed to look at options for a new mower. Nothing has been identified yet that is suitable and affordable. We discussed about sealing of the runway repairs we did last spring. If we have some windy warm days. Don will put out note if weather will be suitable for sealing the repairs before winter.

Activities Chair Report - We have no more events for the year and currently no Christmas party is planned. The next event will be the traditional New Year's Day Snow Fly.

GSLMA Report - Lot of activity from rocket club. Control line area would like to have a charging stand. \$35 dues for next year.

### Old Business

Officer Elections for 2022. Nominations were closed. The officers for 2022 are: President, Dan Dierking; VP, Don Grzina; Secretary, Ed White; Treasurer, Jose Espinosa. Other offices are appointed by the President. If you want to help out, please let Dan know.

FAA Safety Review Management Panel (SRMP). if you have not done so, please respond confirming whether you have or have not taken the TRUST test and have a current registration and have put your registration numbers on all planes before you fly them. The meeting had been planned for December 1 and 2. The FAA needed to reschedule due to availability of critical people. The review is now scheduled for Jan 4 and 5.

New Business - Nothing raised

The meeting was adjourned at 7:40 PM.

Ed White  
Secretary

[https://www.faa.gov/uas/recreational\\_fliers/knowledge\\_test\\_updates/](https://www.faa.gov/uas/recreational_fliers/knowledge_test_updates/)

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

# 2M Acuity Wing - Fuselage Alignment

December 2021 Tech Session

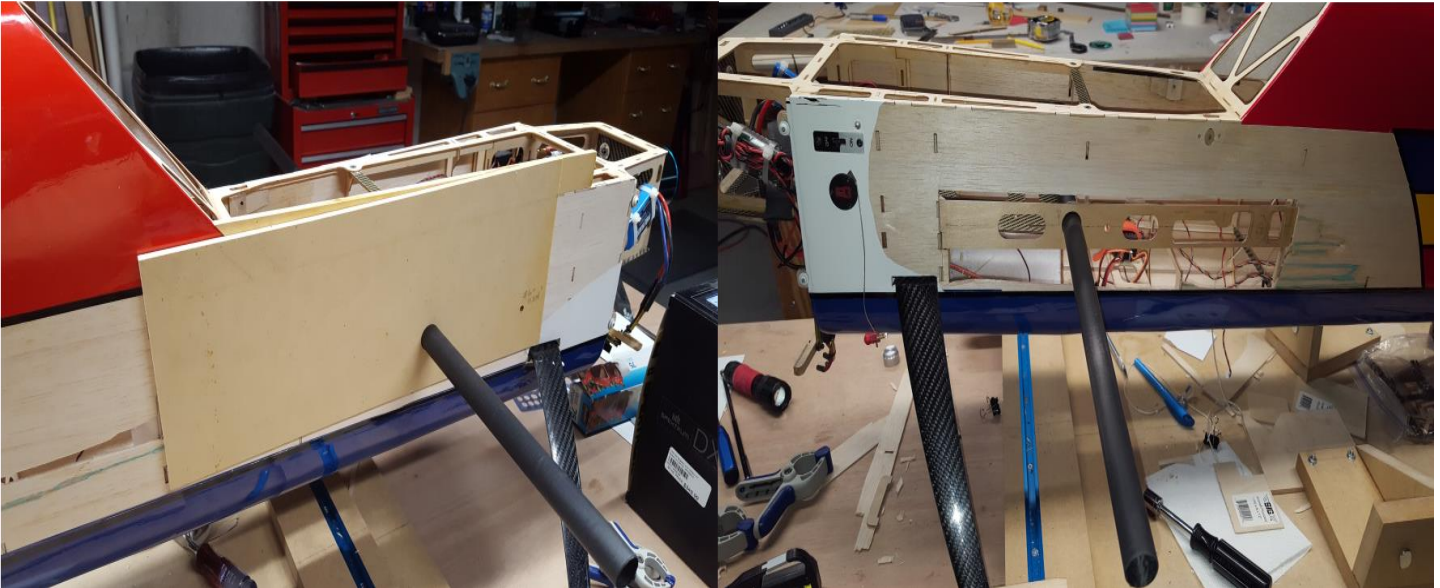
Don Grzina

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

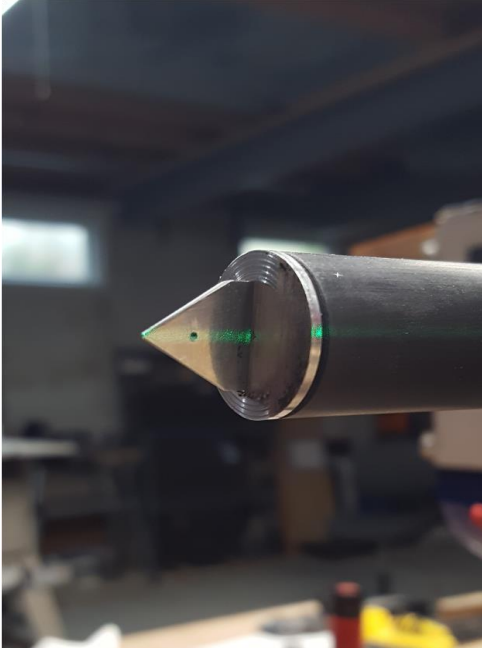


transfer template from  $\frac{1}{4}$ " MDF panel with a close tolerance hole to match the wing tube. Basswood strips were glued to register the panel relative to the canopy sill, as shown in the photo below. Matching basswood strips were then glued on the opposite surface (near side in photo), even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

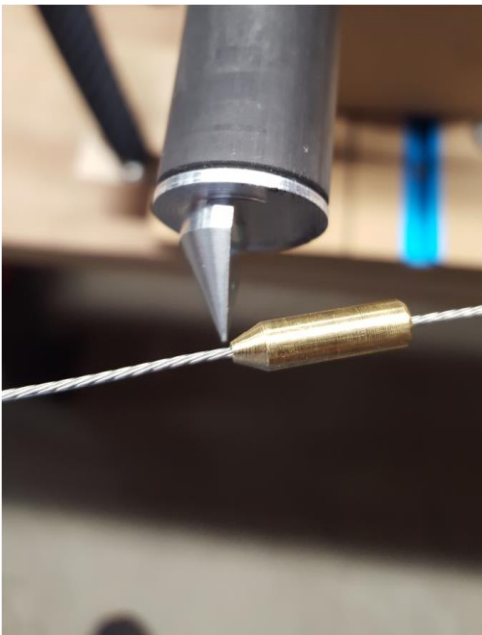


The transfer template was then used to rough in new interior structure to the left-side fuselage with the wing tube sleeve in approximately the correct location. Plywood rings were fabricated with close tolerance holes to the wing tube sleeve outer diameter, and the left structure hole opened slightly 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 center-line. 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 center-line. 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!

# FLASHBACK!

Phantom Flyers E-Fly 2003 through 2007 (photos from RcGroups)









# 2022 Swap 'N' Shop

## We Are Back

Saturday, February 5, 2022



### John Knox Pavilion

Hours: 9 A.M. – 3 P.M.

RC Planes-Boats-Helicopters-Cars  
(Buy-Sell-Trade)

Admission \$5.00 – Kids Under 12 Free

Concessions Available at Noon

Walk-up Registration begins 8 A.M.

(Assuming tables are available)

Vendor setup at 8 A.M.

Doors Open to Buyers at 9 A.M.

**Please Consider Friday Evening Setup**

Pavilion will be open for setup from 5–7 P.M.  
and will be secure over night

**Mail Registration Form and Fee to:**

Duane Hulen

KCRC Swap 'N' Shop  
1020 SE 11th

Lee's Summit, MO 64081

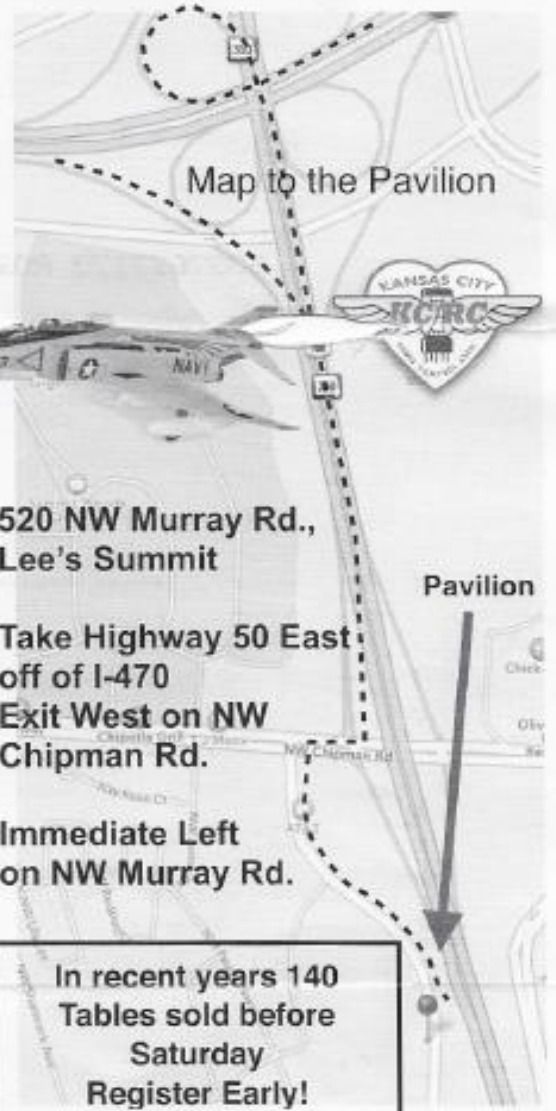
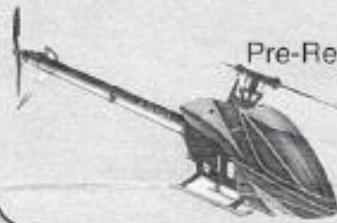
Pre-Registration is Recommended

Tables sell out fast!

Questions? Call Duane at

816.516.4526 or email

[drhulen@sbcglobal.net](mailto:drhulen@sbcglobal.net)



520 NW Murray Rd.,  
Lee's Summit

Take Highway 50 East  
off of I-470  
Exit West on NW  
Chipman Rd.

Immediate Left  
on NW Murray Rd.

**In recent years 140  
Tables sold before  
Saturday  
Register Early!**

Write on this form when you return it if you have a preferred location for your table(s)!

### Registration Form

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_@\_\_\_\_\_

Tables Wanted	#	Price
8 Foot Table		\$25.00
Additional Vendor Admission		\$5.00

**Limited Floor Space for large models, first come, first serve.  
2 table purchases required for floor space.**

Last date for Pre-Registration—Jan 24, 2022  
All table locations will be assigned by KCRC  
One Vendor Admission for each 8' table

Vendor 1. \_\_\_\_\_ 2. \_\_\_\_\_  
Badges 3. \_\_\_\_\_ 4. \_\_\_\_\_  
5. \_\_\_\_\_ 6. \_\_\_\_\_



# **Phantom Flyers RC CLUB**

(Be sure to explore our website: [phantomflyersrc.com](http://phantomflyersrc.com))

2022 **MEMBERSHIP APPLICATION**

- Regular \$150/year x  yr(s) =
  - Family (IRS Dependents) \$155/year x  yr(s) =
  - Non-Participant (Non flying) \$15/year x  yr(s) =
  - Anonymous Donations Welcome
- \*\*\*\*\* Late Renewal Fee \*\*\*\*\* \$15

Note: All new applications received after 1 July of this year will receive next year's dues free

(Late fee required if member has not paid by 31 Dec)

Total Amount Due =

Make checks payable to:  
**Phantom Flyers RC Club, Inc.**

	<u><b>Eligible Member</b></u>	<u><b>Additional Family Member</b></u>
Member Name (/Nickname)	<input type="text"/>	<input type="text"/>
AMA Number	<input type="text"/>	<input type="text"/>
Primary Phone (home/cell)	<input type="text"/>	<input type="text"/>
Secondary Phone (work/cell)	<input type="text"/>	<input type="text"/>
Street	<input type="text"/>	<input type="text"/>
City, State, Zip	<input type="text"/>	<input type="text"/>
Spouse's Name	<input type="text"/>	<input type="text"/>
Primary E-Mail Address	<input type="text"/>	<input type="text"/>
Can Mow Flying Field? (Yes/No)	<input type="text"/>	<input type="text"/>

**My signature below signifies that:**

*I have read, understood and will abide by the Phantom Flyers RC Safety and Field Use Rules.*

*I understand that my participation in this activity is purely voluntary and I agree to hold Phantom Flyers RC Club, Inc. harmless for any and all liability for any injuries including death, which I might sustain while participating in this activity.*

Signature:  Date:

**Submit form and membership dues to:**  
 Ed White  
 10 Wolf Ridge Ct.  
 St Charles, MO 63303  
 Please send S.A.S.E. if you want your membership card mailed

<i>For Club Administrative Use Only</i>	Dues Received _____ Date	Current AMA Received/Shown _____ Date
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<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:

[kevcox@charter.net](mailto:kevcox@charter.net)