



Tri City Flyers

NEWSLETTER



www.tricityflyers.com

OCTOBER 2024

AMA #850

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OCTOBER 2024 PRESIDENT'S COLUMN

Hello everyone.

We will have a club members only fly-in on Saturday, October 19, 2024. Flying will begin about 9am. All members and their immediate family are welcome to attend. Pizza and beverages will be available free for attendee.

The Pioneer Flight Museum has asked us to present a static display of model aircraft for their Fall Wings and Wheels fly-in. The event will be held on Saturday, November 9, 2024. I would like to invite any club member that wishes to participate in the display to please reach out to me for more information. If you cannot participate in the static display, then please consider attending the event to support the PFM and all they do to promote aviation.

Officer elections will be held at the November meeting. Positions to be decided are Vice President, Secretary and Kingsbury Safety Officer. The incumbents for these three offices have agreed also to run for office. I am happy to say that we have had two additional members agree to have their name placed in nomination for the office of Vice President. I am incredibly grateful to all those who have agreed to run for office. But, at the same time, I am a bit disappointed that we have not had more members volunteer to serve the club as an elected officer. Please consider running for office in the future and be a part of helping to chart the course for your club.

We will have our annual Christmas party on Thursday, December 12, 2024. The dinner is free to all club members, spouses and immediate family members. The main course of blackened chicken tenders and sausage with pasta will be catered. We are asking our members to bring an appetizer or desert. Everything else will be provided. We will need some help setting up and tearing down the room so please volunteer if you are able. Rusty has sent an email in announcing the dinner and requesting RSVPs. We will send out a reminder request for RSVPs in late November. RSVPs are needed as we have to tell the caterer how many meals to prepare.

In closing I wish each of you happy flying and hope to see you at the field.

Sincerely,
Ed Valls

Club Meeting Reminder: 7:00 PM on the 2nd Thursday of each month at the American Legion Post 593, located at 326 Legion Drive West, Converse, TX 78109. Unless otherwise informed, you can purchase a light meal at the Post prior to the meeting.



Tri City Flyers October 2024 Meeting Minutes

Call to Order: President Ed Valls called the October Business Meeting to order at 7:00 PM, October 10, 2024. 22 members were in attendance including 6 officers.

Minutes of Last Meeting: Ed Valls asked the attending members if there were any corrections to the September Meeting Minutes. None were offered; Jim Rice made a motion to accept the September Minutes as written in the September Newsletter. Mike Fisher seconded, and the minutes were unanimously approved by the members.

New Members/ Guests: Rusty Koehler reported the Board's decision to bestow Honorary Membership on longtime member Steve Koelle. The Board Members had previously discussed and approved the honorary membership. Sam and Sam Lota, who attended the September meeting, have since turned in their applications and annual dues. Ernest Orem turned in an application and his annual dues, and came before the members to describe his modeling background. He told members he was retired from the US Air Force and had flown R/C in a wide variety of locations, including overseas. He is sponsored by Mike Fisher. Rusty made a motion to accept the applications of the Lota's and Ernest Orem. Mike Fisher seconded, and the members voted unanimous approval.

Treasurer's Report: Mike Zachau presented the members with a financial report as of September 30, 2024. Frank George made a motion to receive the report, Mike Fisher seconded, and the members voted to receive the report as written.

Safety Officers' Report's:

Augie Santiago reported there were no incidents at the Seguin Flying Field.

Mike Fisher reported there were no incidents at the Kingsbury Flying Field.

Field Manager Report: Gil Martinez was not in attendance at the meeting. Ed Valls reported that Roger Freeman had called and requested that the Kingsbury Field be closed to flying on Saturday, October 12, 2024, because of a special event planned by Pioneer Flight Museum. Matt Dirienzo asked if he should still do his scheduled mowing

on Friday. It was determined that due to dry conditions it would not be needed. Ed told members he planned to trim the berms on Monday or Tuesday, in advance of the scheduled Members Only Fly-in on October 19, 2024. Gil Martinez is scheduled to mow the field before October 19.

AMA Business: Jim Rice reported that Chad Budreau is stepping down as AMA Executive Director, and Tyler Dobbs will take over as Interim Director. Johnell Holley asked if Lawrence Harville would be the District VIII Vice President. ED said Lawrence is unopposed in the District VP election. District VIII includes Tri City Flyers.

Unfinished Business:

>Mike Zachau gave a report on the recent National Model Aviation Day finances. He reported that the event had 35 registered pilots. He also told members that the event had been reported to the AMA as our NMAD Fly-in, when the \$500 donation of the proceeds was sent in.

>Mike also reported on the candidates for the November election of Vice President, Secretary and Kingsbury Safety Officer. He said three members had entered their names for VP. They are Charles Roccaforte, Brad Leininger, and Matt Greenlee. There is one candidate for Secretary, John Franklin, and one candidate for Kingsbury Safety Officer, Mike Fisher.

>Ed Valls updated members on the Christmas Party planned December 12, 2024. The party will feature a catered meal and a White Elephant gift exchange. The club will set-up tables for the party. The Catering Company will supply warmers, servers, salad, and main course meal. Members will be responsible for drinks and dessert. The club will also have appetizers to start at 6:00pm, with dinner planned at 7:00. The White Elephant exchange will follow dinner. Participation in the gift exchange is optional. The Club Secretary will notify members by email prior to December 12. Rusty Koehler recommended that we notify The American Legion Management about our plans. Ed assigned, John Franklin to contact the Legion manager.

>Ed Valls confirmed the Members Only Fly-in is scheduled for Saturday, October 19, 2024.



The Fly-in is for Members and Immediate Family only. Pizza and drinks will be provided by the club. Donations by members to offset the costs will be accepted.

New Business:

>TCF Swap Meet tables are available through Frank George, for the TCF Swap Meet, March 7 and 8, 2025. Frank told members that the tables are going fast. He also informed them of the change of date, due to conflict with Garden Ridge Valentine Day plans.

>ED asked members to plan to attend the BAMS Charity Fly-in scheduled for October 12, 2024. He pointed out that BAMS has regularly supported the TCF Fly-ins. Jim Rice told members that River City R/C also has a Fly-in scheduled for October 19.

>Members were reminded that Rusty Koehler is accepting membership dues for 2025 through December.

>Mike Zachau also brought to the attention of members that the annual financial audit for TCF would be in December. He asked for three volunteers to conduct the audit: Mike Fisher, Matt Dirienzo, and Frank George volunteered to do the audit.

Broken Prop Award: John Franklin nominated Ed Valls for an incident at Kingsbury with his recently completed F-86 jet. Ed told members that he had only planned a high-speed taxi but was unable to stop on the grass surface. Mike Fisher nominated himself for two broken props, and an EDF that did not want to fly because of a CG issue. The members voted and Ed won the award unanimously.

Show and Tell: Jim Rice presented a free flight model converted to R/C by his father. The model is in good flyable condition considering it is 35 to 40 years old. The model originally was built from a Pacific Coaster kit, by Jim's father. Jim told members his dad was exceptionally talented at model construction. He converted the airplane to electric power for his son, Gary, who inherited the model.

Adjournment: Mike Zachau made a motion to adjourn, with a second by Frank George. The motion

passed by unanimous vote.

Upcoming Events:

October 19, 2024, Members Only Fly-in at Kingsbury. Members and immediate family only.

November 9, 2024, PFM Fall Wings and Wheels Event at Kingsbury. Event hours 9:00 AM – 4:00 PM.

November 14, 2024, Regular Business Meeting, American Legion Post; Converse, Texas at 7:00 PM

December 12, 2024, TCF Christmas Party, Converse American Legion Post, at 6:00 PM. No business meeting.



Hello all, and welcome to Fall. Here in South Central Texas, the temperatures haven't shown it so far. But the forecasters promise it will drop into the 80's later this week. WOW! Enough weather gripes. I encourage all club members to read this month's meeting minutes on pages 2 and 3. Members will vote on their approval at next month's meeting.

As reported last month, our NMAD Fly-in was a success even though postponing it did not improve the temperature. We did achieve our goal of donating \$500.00 to the AMA Foundation

Thanks to Mike Zachau for his efforts to secure candidates for our November election. I can't remember the last time I saw a ballot with more names than the incumbents. Thanks to the incumbents standing for re-election, and to Brad Leininger and Matt Greenlee, for stepping up to serve

I invite all to participate in the Club Fly-in this Saturday. The Kingsbury forecast is for temperature, mid 80's and partly cloudy, with 5-10 mph wind. This is the first of two free, family oriented events remaining this year. The second is the Christmas Party on December 12. The party details are reported on page 2, above. Please respond with your plans when asked to RSVP. It is very important to give the caterer an accurate number because that is the number he will prepare for. Don't think you can just show up "and there will be plenty" - not this year.

Between the Club October and December events, please consider supporting our static display at the PFM Fall Fly-in November 9. We will have indoor hangar space to safely display your models for the public to view. You need to have your model, or models, there by 7:30 AM, then park your vehicle and complete any assembly required by opening time, nominally 9:00 AM. Club members will be on site all day to answer questions and discuss our models with visitors. Our flight simulator will also be running for anyone interested. In past years, the crowd begins thinning around 3:00 PM, and we can begin shutting down around 3:30. Contact Ed Valls or me for more details.

Moving on, with a little more detail about Ed Valls' "Broken Prop" award for his new F-86 jet. Ed said it appeared the wheel brakes locked up and the tires skidded on the Kingsbury turf when he tried to stop. Both main gear were broken from the wing.

So, as expected, there is structural damage to repair. But repairing the finish, will be most difficult.

Before discussing this month's Show and Tell, I am adding an amendment to Bill Anderson's September item about LiPo battery chargers and fire safety. It was noted in the minutes that "He warned members that the charging, storage, and use of LIPO batteries presents a significant fire hazard." It was also noted in the Show-n-Tell discussion, that "Most advice regarding LiPo handling focuses on the batteries. Bill's point is that you should also not blindly trust the electronic devices used with LiPo's."

Both of statements reinforce the often quoted advice that continuous monitoring of LiPo charging and discharging is essential to fire safety. Monitoring includes visual, such as watching the charger display for unexpected changes and watching for possible battery swelling. Some chargers have a temperature probe that gets attached to the battery - use it. Any good charger should have internal temperature monitoring and cooling fans. Listen to be sure the fan (or fans) is working. Finally, tactile: touch the charger and battery. Expect a little heat, but if either feels uncomfortably hot, shut them down!

Thanks to Jim Rice, we had one new Show-n-Tell this month. Having been in the hobby many years, and having owned a hobby shop, I expect he has an impressive hangar of models. This month he brought us a the Pacific Coaster, a classic free flight design. Jim's Dad converted the Coaster to RC with



the 4-stroke engine on the table for power and used an innovative linkage for the elevator and rudder connections. He also bolted the wing on instead of the customary rubber bands, and built a flush cover over the wing's center. Jim's electric power conversion uses an E-flight Power 32 outrunner with a 4S

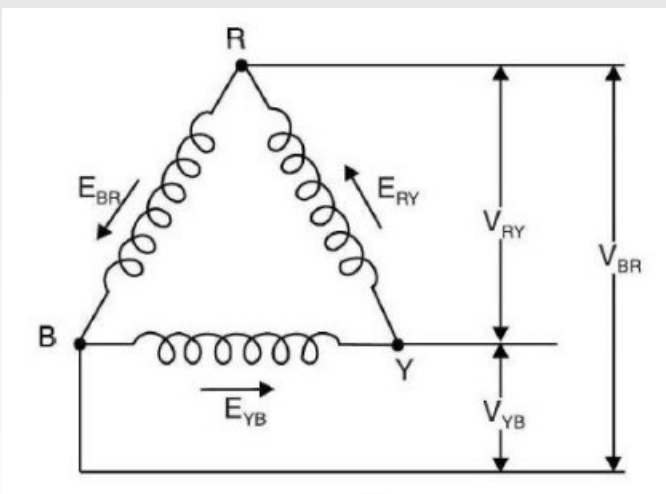


LiPo battery. He made a battery box in the fuselage bottom, in front of the landing gear. An ounce and a half of lead was needed in the cowl to rebalance the airplane. Plans for a 60 inch wingspan version of the model, designed by Elbert Weathers, is available from the AMA, and other, Plans Services.

I can't see leaving so much white space, so I will offer this discussion of a recent project of mine. Those of you who are interested in knowing a little more about the outrunner motors may find it useful.

The project was born out of necessity because I use a program called Motocalc to compare different electric power components for a specific model. Recently I decided to update the no-name motor that came in my Hobbyzone Husky ARF, because I felt its performance was deteriorating. The problem was that Hobbyzone does not have all the motor specs needed for Motocalc. A search online found other ARF brands using the same motor, but none that provided any more details.

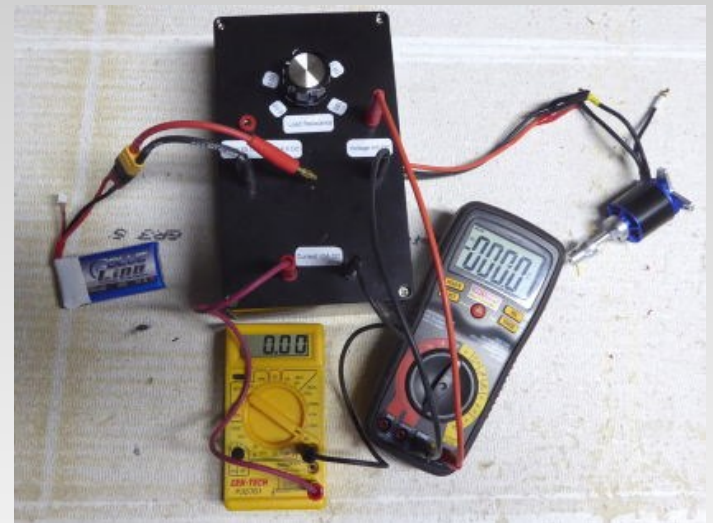
All I had was the motor designation 3541-750Kv, but I needed its weight and internal resistance for Motocalc, plus its dimensions to search for a replacement that would fit the ARF, because the number 3541 is just a hint of its size. Removing the motor let me get all the dimensional figures. Internal resistance is key to comparing motor performance. The majority of outrunner motors we use are wired with a delta connection, which can be represented as shown here. The wires that connect to the ESC come from points B, R and Y. The three re-



distances, E_{BR} , E_{YB} and E_{RY} represent the wire windings in the motor. (I know resistance is usually desig-

nated by "R", but I was too lazy to draw my own diagram.) The total resistance between any two contacts is a parallel combination of all three windings. Ideally, the winding resistances are equal, say E_i . Assuming that is true, the resistance measured across two wire connection points is $E = 2 \times E_i / 3$. This is the "phase to phase" winding resistance, the value usually found in motor specification tables. The individual winding "in phase" resistance can be computed by solving the equation above for E_i . OK, sounds easy, but measuring milliohms accurately requires a **very** expensive special test meter. An alternative is to use the equation $R = V/I$ to determine the resistance R indirectly by measuring the voltage drop V across the motor contacts with a known DC current I. An online site described a circuit and home made device to make the required measurements.

Finally - here is the device I built. The box is simple, with connections for external current and voltage measurement, instead of dedicated meters



in the box. Gold plated connectors and 12 gauge fine stranded copper wire were used to minimize undesired circuit resistance. Solid connections to the motor connectors is critical to accuracy.

That's it for this month. Let me know if you have any interest in future items like the one above, as well as other comments or suggestions.

Frank George, TCF News Editor
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