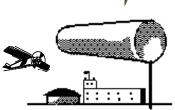
THE WINDSOCK

PUBLICATION OF THE TRI-LAKES R/C FLYING CLUB

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VOLUME 12 ISSUE 5

MAY 2005

MAY MEETING

MAY 10, 7:00 PM

Meet at ROCKY TOP FIELD. In case of severe weather meet at the **Branson Community Center.**

Program

Bring your new projects for Show and Tell.

THE PRESIDENT'S CORNER

Hello Club members! What a great day April 16th turned out to be! The weather was fantastic and the wind was with us. We had a great turn-out with 31 people. Lunch of hot dogs and all the trimmings was enjoyed by all. The grounds looked great! Our thanks goes to Dick Haan and his helpers for all their hard work.

Well, once again I tried to fly, but had technical difficulties with my plane. Ray Dixon did get it up for about 3 minutes, then the plane went on its own. Trying to land was a bit scary, but thanks to high grass and Ray's skill, no damage was done. I'm ready to try again next time.

TRI-LAKES R/C **FLYING CLUB**

PRESIDENT GARY ACTON 334-3917

VICE-PRESIDENT **BUD AUSTIN 861-4466**

SECRETARY ANNETTE McEVOY 417 883-9630

TREASURER ERV ROHDE 538-2439

SAFETY OFFICER JOHN WOODS 338-8419

FIELD MARSHALL **DICK HANN 563-0018**

INSTRUCTORS RAY DIXSON 870 426-4310 ROSCOE FUDGE 336-5841 **JOE MAJOR 337-5808 ERV ROHDE 538-2439** JOHN WOODS 338-8419

It was neat to see Erv fly with streamers behind his plane. Great show Erv!

I hope to see everyone at the next meeting, which will be at the Field at 7:00 p.m. on May 10th. Come early and do some flying! Take care.

Gary

TRI-LAKES FINANCIAL STATEMENT 2005

		ΑP	R	YTD
BALANCE	4/1/2005	\$	987.62	\$ 960.40
INCOME-DUES		\$	45.00	\$ 821.72
INCOME-SHIRT	S&CAPS	\$	20.00	\$ 35.00
INCOME-FOOD		\$	68.00	\$ 68.00
INCOME-50/50		\$	9.50	\$ 30.50
INCOME-MISC		\$	-	\$ -
EXPENSE-FIEL	D	\$	178.32	\$ 791.42
EXPENSE-NEW	SLETTER	\$	7.50	\$ 14.90
EXPENSE-SHIR	TS&CAPS	\$	-	\$ -
EXPENSE-FOO	D	\$	50.14	\$ 50.14
EXPENSE-AMA		\$	25.00	\$ 130.00
EXPENSE-Web		\$	-	\$ -
EXPENSE-mee	ting room	\$	20.00	\$ 80.00
EXPENSE-MISC		\$	6.54	\$ 6.54
BALANCE	5/1/2005	\$	842.62	\$ 842.62

MEETING MINUTES

TRI-LAKES R/C FLYING CLUB April 12, 2005

President Gary Acton opened the meeting at 7:35 p.m. at the Branson Community Center. All officers were present. There were 18 members, guests Jerry Silva and David Adams and members wives Doris Rohde and Janet Woods present. The minutes from the March meeting were approved as published in the April newsletter. Erv Rohde reported that the treasury balance as of April 1st was \$987.62. The 50/50 raffle was won by Erv Rohde who received one half of \$19.00.

Announcements and Old Business: Kevin Marsh has made and delivered a roller to the field to help with the maintenance.

John Woods announced that the cost of the portable pilots stations will be around \$45.00. Motion by Howard Shire, 2nd by Dick Haan to construct 3 stations at the present time. Passed unanimously.

Everyone was asked to bring shovels this weekend to help to fill in the holes on the runway once again. If we get started around 9:30 that should leave plenty of time for flying before the 1:00 start of the Fun Fly.

Howard mentioned that there is now soda pop in the refrigerator for .50 each & also there's a can there to pay for them. This is operated under the honor system!

A reminder that the Fun Fly will be this weekend and events are as listed in the March Newsletter.

It appears that a Club event is on for us at the new Branson Center-Gary Acton will keep us posted. We all need to be thinking about what would help to put on an interesting presentation of our sport/hobby.

It was announced that we have received our 2005 charter and also the certificate of insurance.

Gary Acton read a letter from the AMA US Aerobatic Team requesting sponsorship towards their trip to France this year. Motion by Joe Major, 2nd by Jack McEvoy to donate \$25.00. Passed unanimously.

John Woods brought a couple of books/ magazines by EAA, IMAA for anyone interested in them. Gary Acton brought a large selection of magazines for anyone interested in them, some were quite old.

Dick Haan is looking for volunteers to help with the mowing on occasion.

New Business: There was no new business.

Program: Joe Major brought his 23cc Zenoah gas powered heli dressed out in a new Schweizer 300 fiberglass body. He's using a JR9303 radio that really does it all including adjusting all servo speeds, change electric gear speeds. All functions are displayed at the same time instead of having to go from screen to screen. Came complete with four 8311 servos, and a 649 PCM receiver for \$800.00. The model 7700 TCM is \$500.00.

Kevin Marsh brought his pylon racer that is currently under construction. This is a 40 size and being built from a kit and is the first one that he's ever built.

Meeting adjourned at 8:20 pm.



Above is Kevin Marsh's Talley Whacker pylon racer which he has under construction. Yes that is the name on the plans.

THE EDITOR'S NOTE PAD

Our membership now stands at 46 which is a good level for this time of the year. Also the field is in good shape and seems to be improving little by little every year.

However there does seem to be a problem with unauthorized use of the field and someone leaving the gate open. For insurance reasons it is important to all the current Club Members that no one flies at our Club field without a current AMA membership. This is a Club rule! Also no "guests", even with a current AMA card, should be at our field without a Club member present. So how do we handle these situations. Well probably the most obvious thing that could be done would be to change the combination on the gate lock and give it only to current Club members with the understanding that the combination is not to be passed on to any non Club member. The other situation is a little trickier as many members are hesitant to ask to see a guest's AMA card. And some "guests" will swear that they have a current AMA card but it's at home, when in fact they are not a current AMA member—yes, it has happened. One way around this is to get a new frequency board where you must leave your AMA card when you take a frequency pin. This is very common at other fields. What happens if you accidentally leave your card at home? Same as if you left your transmitter home-you don't fly!. The Club should give this some consideration.

Time to land for this month.

Below is Mike Anderson's new Tensor 4D upside down on its maiden flight. It flew quite well and shows a lot of potential but is a fairly low wind model. To the right is Joe Major's new Schweizer 300 helicopter conversion and his new JR 9303 do everything radio. With all that glass area, Joe, it could sure use a pilot



SAFETY FIRST

We had a bunch of flyers at April's Fun Fly and I want to thank all the members for keeping the flying activities safe. It was especially helpful when several people were flying and each pilot would announce when they were taking off and when they were going to land. I think there were 5 flyers up at one time which makes the skies a little crowded as well as exciting. We probably need to use "spotters" when we get that many planes up — I would like to discuss this at our next Club meeting and would appreciate your input.

John Woods Safety Officer

CURRENT 2005 CLUB MEMBERS

The following Club members are current in their 2005 dues.

Gary Acton, Denise Anderson, Erin Anderson, Mike Anderson, Bud Austin, Sid Beckham, Rich Berthold, Dave Carnahan, Cletus Cook, Del D'Alessandro, Paul Denny, Ray Dixson, Vicky Dixson, Phil Equi, Roscoe Fudge, Cody Garber, Larry Gliser, Bill Griffin, Dick Haan, Jim Halbert, Don Johnson, Reeder Jones, Curt Kaurse, Don Livermore, Joe Major, Kevin Marsh, Evan McCartney, Mark McCartney, Annette McEvoy, Jack McEvoy, Tom Mckenzie, Dave Medley, Gary Metzger, Mark Niebrzydoski, Dick Peterson, Henry Racette, Erv Rohde, Craig Schmidt, Howard Shire, Del Silva, Robert Smith, Dale Strahan, Roy Steinestel, Henry Stratmann, John Woods and Homer Zobel.

If you are not on the above list but feel you are current in your 2005 Club dues contact Erv Rohde.



APRIL FUN FLY

The wind was a little brisk but it was a great spring day for a Fun Fly. Quite a crowd had gathered to see who would win the first Fun Fly of the year. After a BBQ hotdog lunch with all the trimmings it was into the pilots' meeting for a briefing on the events. Nine fearless pilots were then ready to go.

The first event was a timed flight with loops and rolls. Five points for each loop and roll in the first 60 seconds then land at exactly 90 seconds. One point penalty for each second off 90. First place went to Mike Anderson with 56 (60-4) points, second place was a tie with Erv Rohde and John Woods both getting a 49 (50-1). Fourth place, Ray Dixson with 42 (45-3) and fifth to Roscoe Fudge with a 33 (45-12).

The next event was a carrier landing. Put the main wheels in the first box (first wire) and get 3 points, wheels in the second box (second wire) 5 points, wheels touching down in the third box (third and desired wire) 10 points and touch down in the fourth box (fourth wire) 3 points. The "wires" were 12 feet apart. Everything else is off the carrier. Total score for three passes whether the plane touches the deck or not. In the picture directly right you see first place finisher Erv Rohde as he picks up three of the wires and flys off with them. He got 25 points (5,10,10). Second went to Mike Anderson with 20 points (10,10,0) and third was a 13 point tie between Don Johnson (0,10,3) and Ray Dixson John woods got fifth with 11 points (0.3.10).(5,3,3).

The last event was the dreaded egg drop—actually very small water filled balloons were used. Tape or rubber band a foam coffee cup to your plane (this really improves the aerodynamics!!), put the balloon in the cup, take off and somehow drop the balloon over the target. Closest to the target wins. The picture directly to the right shows John Woods' Gee Bee just after he had flipped the balloon out of the cup. Note the small white balloon behind his plane. Mike Anderson had the first place drop of 44' 5". Second place went to Erve Rohde with 60' 7" and third went to John Woods with 69' 9". Fourth place went to Bud Austin at 93' 3" and fifth went to Howard Shire at 157'. The other four pilots lost the balloon off the field or too far away to find.

The overall winners and gatherers of coveted Top Gun 2005 points were Mike Anderson, First place with 270 points, Second place was Erv Rohde with 230 points (the Ugly Slabs, aka Pro Twisters do it again). Third place went to John Woods with 130 points, Fourth place went to Ray Dixson with 80 points and Fifth place went to Don Johnson with 60 points. It should be noted that even though it was somewhat gusty, no planes were damaged during the Fun Fly. Are we getting to be better pilots or what?

The Fun Flys would not be much fun without the efforts and contributions of many people. Many thanks to this years' Fun Fly Director, Mike Anderson, and the people that helped him set up the events and helped scoring—great job. Thanks also to Howard Shire for getting the food supplies for the BBQ and Phil Equi for acting as chef and to the unknown donors of other goodies that showed up at lunch time. Also thanks to Field Marshall Dick Haan for having the Rocky Top Field in such great shape. A special thanks to Craig and Marsha Schmidt for donating a \$25 Fiberglass Specialties gift certificate which was raffled off after the Fun Fly and won by Erin Anderson.

The next planned Fun Fly is June 18th.



DOING ELECTRICS

By Don Johnson

How do you measure thrust? Actually it's fairly easy but first why measure thrust? If you have a streamlined plane like a fighter, pattern ship or pylon racer, thrust will not be a good indicator of performance. These types of planes will have high RPM motors, relatively small props with a large pitch. They will probably have a thrust to weight ratio of 25% to 50% which does not sound impressive and they will accelerate rather slowly. However once airborne and having low drag, they will accelerate up close their pitch speed which may be 100 MPH plus. Kind of like starting your car moving in second or third gear.

Conversely the slower your plane flies the more thrust will be a good indicator of performance, especially if you get into 3D flying where thrust to weight ratios of 150% to 200% are very desirable. For planes without wheels, at 25% T/W you might need to catapult launch the plane, at 70% T/W a hand launch should be fairly easy and at 100+% T/W you only need to let go and start flying.

It is very easy to measure thrust, just tie a scale to the tail and push the throttle to full then read the scale. Just make sure the scale is directly in line with the motor's thrust line and that there is little resistance from wheels or pulleys. Also make sure the plane is safely restrained and don't let anyone stand in front of or close to the plane. The pictures on the right show three easy ways to measure thrust. If you want to test a motor's thrust before it is mounted in a plane just make a simple wheeled dolly and then measure the same was as in a plane.

An electronic fish scale and some cord is about all you need to measure thrust. I picked up a Nor Mark fish scale at Bass Pro for about \$10, which measures to the closest 0.5 ounce up to five pounds. This works well for most electric planes. For big planes with a thrust over 5 pounds (80 ounces) get the 10 pound electronic fish scale.

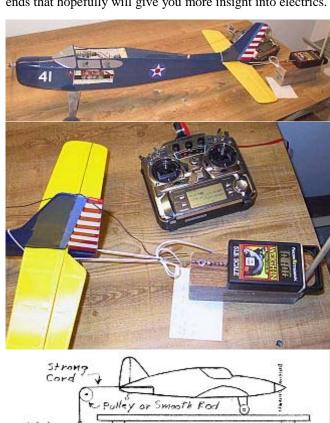
If you get into very small electrics where thrust could be as little as one ounce or less, you might want to consider the thrust measurement arrangement shown in the top drawing directly to the right. Here a weight is placed on a scale and the scale reading (A) is noted. Then run the plane at full throttle and note the scale reading (B). The thrust will be A minus B. Make sure the thrust line is close to horizontal and the line to the weight is vertical for accurate readings. Also make sure the weight is definitely more than the motor's thrust. Any 4 or 5 pound electronic postal scale will work if it will measure to 1.0 grams or 0.1 ounces. You should be able to find these scales at office supply stores. I have made up an 8 ounce and a 1 and 2 pound weight by adding BBs (lead shot would have been better) to plastic pill containers. The weight was determined by the accurate postal scale. These "standard weights come in handy for a lot of things and can be used to check the accuracy of the electronic fish scale.

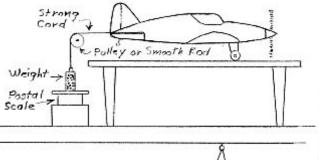
As far as accuracy goes, plus or minus 5% is fine. Even 10% would give usable results. Actually by using the same scale, all measurements will be relative and differences in thrust between different motors, props or batteries will be very accurate.

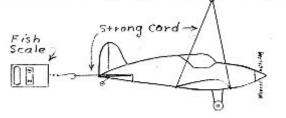
While making thrust measurements or any other measurements keep safety in mind. Even small electrics can give you a nasty cut. Make sure the plane is well secured and people or pets are well away from any danger.

It is suggested that notes be kept when taking all measurements. Actually make up a form where you record motor, battery, no. of cells, prop diameter and pitch, volts, amps, watts, RPM and thrust. These notes will be a great help in selecting the right motor, battery and prop combination for a new plane.

Next month we will wrap up this series with some odds and ends that hopefully will give you more insight into electrics.







Notes from an e-flier

from the Prop Masters RC Aero Club, Warrenville IL by Mitch Gerdisch Dave Masters, editor

Flying electric airplanes is just one more facet of this great hobby and more and more pilots are trying electric flight. Therefore, for those budding e-fliers, I thought I would share a few thoughts from my four years of experience in this part of the hobby.

1. Once that battery is plugged in, assume the propeller has only one goal in life and that is to hurt you. Even with throttle locks on transmitters and switches on speed controllers, once you plug that battery in, you want to make sure you keep away from the propeller. When a gas or glow-motor driven propeller hits something it will generally stall the motor, but not without doing some damage. An electric motor will not stall; it'll just draw more current in an attempt to keep going. So, an electric driven propeller can do much more damage. Thus, it must be given your utmost respect.

The switches on speed controllers are no guarantee either. I've had motors start spinning even with the speed controller switched off.

- 2. Use quality connectors. I see some folks using Tamiya connectors. Tamiyas are not really suitable for RC flight since it's not a matter of if they will fail, but rather a matter of when. For small models, Dean's makes micro connectors which are well liked. For larger models, Sermos (AKA Anderson Powerpoles) or Dean's Ultra connectors are liked as well. These are just a couple of choices, but the bottom line is to use a quality connector.
- 3. Finding a good motor, propeller, and battery combo is a bit science and a bit art. On a glow model, you generally combine a known engine and a known propeller (eg. .40 engine with a 10 x 5 propeller or something like that). In electrics, it can be a bit more complicated since you also have to account for the number of cells, plus there are a number of motor and gearbox combinations. The easiest thing to do is simply find a combination someone else is successfully using in a similarly sized model and copy that. One source for this sort of information is the electric power systems forum like www.rcgroups.com.

I hope this helps those thinking about trying out electric flight. And, feel free to contact me at telemitch@wowwav.com if you have any follow-up questions.

From the AMA March 2005 National Newsletter

TRI-LAKES R/C FLYING CLUB Don Johnson - Editor 272 South Port Ln. Unit 33 Kimberling City, MO 65686		