

# NEWS

Seven Towers R/C Club, Arlington, Texas  
June 2003 - Volume 16 Issue 6

Club Internet Web Links:

<http://www.geocities.com/strcc2002/index.htm>

<http://racingrookies.tripod.com> (no www)

## Meeting Notes

### Ramskill Field – June 9, 2003

The meeting was called to order by President Stan Sims at 7:06 P.M. The following items were brought up and discussed:

Ed Curtis mentioned that the runway was cracking and that we should look into sealing the runway. This was done approximately 4-5 years ago. Stan will look into the cost of this project. It was decided to go ahead with the project if the costs were less than \$500. A date of July 19<sup>th</sup> was set to seal the runway. Starting time for the project will be 9:00 A.M. Mark this on your calendars and plan to come out for some real work. Plan on bringing a pair of shoes that can be thrown away. The last time this was done, I ended up tossing mine away. The asphalt sealer comes in 5 gallon buckets. We will need a stirrer, and some squeegee's to spread the tar substance over the runway. Likewise, after a day or two, we will have to paint the stripe back down on the runway. If anyone has any experience or ideas in repairing the edges of the runway during this process, please give Stan (817) 483-0240 or Bruce (817) 483-8223 a call.

Ed Curtis noted that the mower steering wheel was slipping, and it was noted that the mower manual has been lost. If anyone knows

Please Mail All Correspondence and Membership Dues to:

**STRCC**  
**P.O. Box 174334**  
**Arlington, Texas 76003**

### Club Upcoming Events

July 13, 1:30 PM – Rookie Races

July 14, 7:00 PM – Club Meeting  
at Ramskill Field

July 19, 9:00 AM – resurfacing runway

where the manual is, please get it to one of the club officers. The mower is a 19 HP twin Turbo Cooler 46" 6-speed Craftsman model number: 917.256660, Serial 061896D002042.

Duane Reidel mentioned that if anyone is interested in indoor electric flying, there is an opportunity once a month at the Lockheed Martin Recreation Association. Contact Duane if you are interested. Likewise, if you are wanting to fly control line, Duane would like to talk to you. Duane's number is: (817) 483-2557.

It was discussed whether or not to support the national acrobatics team. It was decided that our club would only support a team that has members from Seven Towers and who are actively involved with that team.

Rookie races for the month were canceled.

# Swap Meet

There is still talk of putting up a new banner or sign recognizing the field as Ramskill Field. Bruce Anderson had contacted the DEAF newsletter editor, Greg Judy (vgg@VinylGraphicsByGreg.com), who has a business in vinyl graphic signs. Bruce found out that Greg produced the Golden Triangle Club sign and it was around \$300. I will show the club sign here and include a description of what it is made from.



From Greg's website: *"The Golden Triangle Field sign is made with Econolite. This sign board is heavy corrugated plastic with aluminum sheets bonded to both sides. One side also has white vinyl for lettering and graphics."* You can see other examples of Greg's work by following the link below:

[http://www.vinylgraphicsbygreg.com/Sign\\_Gallery/sign\\_gallery.html](http://www.vinylgraphicsbygreg.com/Sign_Gallery/sign_gallery.html)

For those that are interested in designing a logo for the sign, please contact Bruce Anderson at (817) 483-8223. One input for the sign was to have it say "Ramskill Field home of Seven Towers Remote Control Club". Bruce is going to investigate some other options along with coming up with a design for the sign. For those of you who are artistic or have some input, please bring them to the next club meeting.

The meeting was adjourned.

Submitted,  
Bruce Anderson – Newsletter Editor

Ken Sloat received some information from the North Texas Aeromodlers Club. They are holding their first annual swap meet on August 23, 2003. The event will take place at the Denton Civic Center, at the corner of Bell and McKinney St. Opens at 8:00 AM till 4:00 PM. Admission: \$5.00 for age 12 & over. Door Prizes Every Hour! Raffle Tickets \$1.00 for 1, or 6 for \$5.00 (Dwg @ 3.00 PM). For more info call: Doyle Irwin (Event Director) (940)-368-2301 or check out their Web site at:

<http://www.aeromodelers.org/swapmeet.htm>

## Flight Data Recorder

Ralph Snow passed on this information for a flight data recorder. If you want to keep track of your aircraft's altitude, airspeed, battery voltage, and positions of all servos, than you need to check out this product from Eagle Tree Systems.



I think the Rookie racers need to invest in this and put one in Joe Sudduth's plane to see what he does to make his plane go so fast! If you're

interested in this type of technology, look them up at:

<http://www.eagletreesystems.com/>

# Weight and Balance

by Bruce Anderson

I recently came across a web site that offers good deals on various types of electronic equipment. One of the offers from this web site was a free electronic scale. Since almost everybody else who has a Rookie can tell you what his plane weighs, I couldn't resist and ended up getting the scale. So now that I have one, what can I do with it?

The first and easiest question is to weight my only flying Rookie. I measured the weight of the entire flying Rookie without gas and it weighs 4 lb 11 oz. That's getting close to the limits of the scale as it is only a 5 lb scale. I measured the aircraft weight by stabilizing the model nose on top of the scale.

The next thing I wanted to see what the weight of the wing was. The wing weight measured 1 lb 8 oz. That would make the fuselage, engine, receiver, battery, servos and linkage to weight 4 lb 11 oz – 1 lb 8 oz = 3 lb 3 oz. This was a standard Rookie kit built to the plans with no modifications to reduce weight. The pictures below show that the two



individual weights add up to the total measured aircraft weight and I believe I have a good handle on the total aircraft weight.

Being the engineer that I am, I thought I could calculate the center of gravity for the aircraft. With that said, you can see the set up that I used to determine the aircraft weight under the main gear. This setup was required to keep the incidence of the aft tail at zero degrees. All of the weight calculations need to be with respect to a reference frame. My reference frame was one which placed the aft tail at a zero degree incidence.



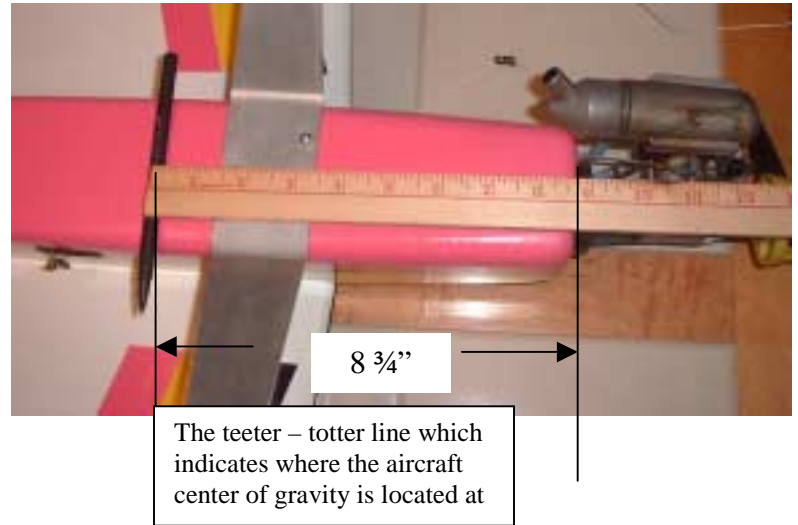
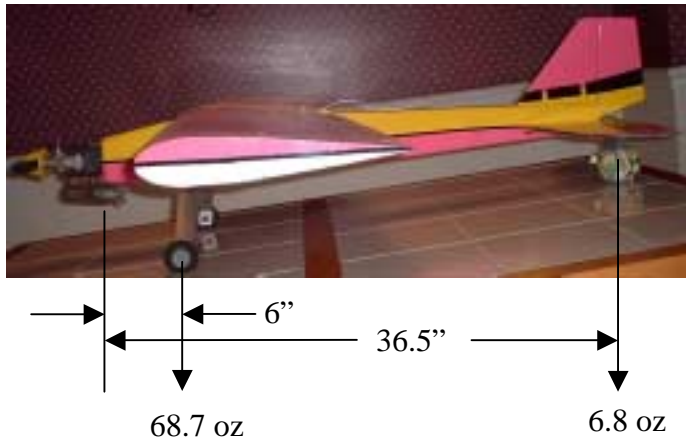
The weight of the main gear plus the ruler was 4 lbs 6.2 oz. The weight of the ruler alone was 1.5 oz. This would make the weight of the aircraft under its own gear equal to 4 lbs 4.7 oz.

Then I measured the weight of the aircraft with the main gear on the table and the scale set on books so that the incidence of the tail was zero degrees. The weight of the aircraft setting on the tail wheel was 6.8 oz. Adding the aircraft weight on the main and tail wheels is 4 lb 4.7 oz + 6.8 oz = 4 lb 11.5 oz. This looks pretty good for the total aircraft weight.

Now for the calculation of the aircraft center of balance. I will use the engine firewall as a reference to determine the aircraft

C.G. The equation for the aircraft center of gravity is:

$$X_{cg} = [ \text{sum } X * W ] / [ \text{sum } W ]$$



Where x is the location of the weight measurement, and W is the weight measured:

$$\begin{aligned} \text{sum } X * W &= 68.7 * 6 + 6.8 * 36.5 = 657 \text{ oz-in} \\ \text{sum } W &= 68.7 + 6.8 = 75.5 \text{ oz.} \end{aligned}$$

$$X_{cg} = 657 / 75.5 = 8.7''$$

What this all means, is that an analytical analysis of the aircraft's center of gravity is 8.7" aft of the firewall.

Now this all took about an hour to setup, calculate and do the figures. The easiest way to do this is to take a pen like what I have show and move it along the length of the fuselage until the aircraft teeter-totter along the pen axis. I did this with the airplane and came up with a dimension that was 8 3/4" from the forward firewall. That calculation only took about 1 minute..... Man I tell ya, those engineers are sure dumb! It takes them an awful long time to figure something out!



### Rookie Racing – June 2003

The Rookie races were not run for the month of June. There was some rain in the morning and that was enough to call off the races. Likewise, I was unable to attend as I was traveling for business. The following Sunday was fathers day and as a result, no races were run for this month.

The July races are scheduled for **Sunday, the 13<sup>th</sup> at 1:30 P.M.** Hope to see you at the field for some great races. Race cancellation due to weather will be made by 12:30 P.M. and can be heard by calling Bruce Anderson at (817) 483-8223. Races canceled for weather will be rescheduled for the following Sunday. A copy of the race rules is posted on the frequency board and on the Internet at :

[racingrookies.tripod.com](http://racingrookies.tripod.com)

(no "www" in the address). For any other questions or comments, call or email me at [brucemarsha@juno.com](mailto:brucemarsha@juno.com).

**Don't forget the next Club Meeting  
July 14<sup>th</sup> 7:00 PM at Ramskill Field**

**Resurfacing the club runway:  
July 19<sup>th</sup> starting at 9:00 AM**