



THE FLIGHTLINE



AMA CLUB 668 SINCE 1968
RACINE RADIO CONTROL CLUB INC SINCE 1968

RRCC May Issue
May 21, 2023 Newsletter

WE ARE ON THE WEB
www.racinerclub.com

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Racine R/C Club Meeting Minutes

April 16, 2023

Time: 1:00 PM

Location: R/C Flying Field

Open Meeting - Jim opened the meeting at 1:00PM. 22 members were present.

Welcome - New Members & Guests – No new members or guests were present.

Minutes - Last Meeting – There are no changes to last month's meeting minutes.

Reports

President-Jim Litwin reported the new wind socks have been installed with help from Roger Nickolaus, Darrell Hossalla and Jason Fisher.

Roger also made new pipe sleeves to increase the number of starting positions in the big plane area. Hoss helped with the installation as well. Fuel cans have new vents and pour spouts so there should be no leaking issues.

Received a phone call from Bob Bowers, the Mount Pleasant DPW Forman. There must have been an issue at the compost site with his people because he will be implementing a new rule regarding the closing of the compost site.

Signs are being made and will be installed beneath the existing signs which indicate the hours and days the site is open.

Signs will indicate the gate will be closed 15 minutes prior to the closing of the site so everyone is out by the time of closing time.

I commented to him about overtime issues with his employees and he only indicated the need to make the change.

He has already made the change on the village

website concerning the compost site. We talked about the angry reaction of the people coming to the site.

Workers are to go to the gate and close it 15 minutes prior to closing. He said we could use some discretion if we wanted to and give the residents a little more time (be the nice guy).

Not sure when this is starting, but I did observe DPW worker measuring the existing signs.

Also asked Bob Bowers to add another green sign indicating hours etc. at the stop sign across from the compost site shelter.

Email msg will sent out when this new policy starts with more implementation details.

Vice President- Roger Nickolaus had nothing new to report.

Secretary/Treasurer-Bob Johnson Current membership as of this newsletter.

Senior Members	38
Open Members	12
Junior Members	<u>2</u>
Total	53

General Fund-Continues to be healthy. We are well positioned to deal with any expenses (planned or otherwise) for the balance of 2023.

Our yearly donation to the Mt. Pleasant Recreation Department was made in the amount of \$300.00. This money helps sponsor two softball/T-Ball Teams.

Wisconsin Non-Stock Corporation filing was made. The cost for this is \$25.00.

Winnebago RC Flyers have their Fun Fly/ Swap Meet at their field in Oshkosh on July 23rd.

Lodi area RC Club have their Fun Fly/ Swap Meet on May 21st in Lodi, WI

Newsletter Editor-Dennis Vollrath had copies of the Newsletter and Membership Listing.

Field Chairman- Trygve Smalley was not present.

Tractor Chairman- Eric Armantrout looked over our equipment and found that all is ready for the 2023 flying season.

Web Master-Ron Hayes was not present.

Safety Officer-Darrell Hossalla had nothing new to report.

Compost Director- Chuck Roberts reported all is good.

Old Business- Nothing to discuss.

New Business – Clubhouse walls will come down on (Correction) June 3rd.

New Pilots – None

Show & Tell – Denny Vollrath showed his model Sterling engine designed after those Sterling hot air engines commonly used in the mid 1850's. The system ran well during the presentation. These are low atmospheric pressure engines used to pump water 150 years ago. The Sterling engines ran by just building a fire under one end of the engines two cylinders. The fire could be anything from firewood to coal to LP gas.

These 1850's Sterling engines put out around $\frac{3}{4}$ horsepower, and weighed around 500 or 1000 pounds. Denny's engine put out about 1/1000 horsepower!

Raffle Drawing – Chuck Roberts won the Raffle. Total was \$23.00 with \$21.00 going to the club and \$5.00 to Chuck. Thank you Chuck!

Close Meeting – Jim closed the meeting with a reminder that the next club meeting will be Sunday May 21st at 1PM at the field. Many members will not be present due to the Joe Noll event.

JIM'S CORNER

Well, it's the 2nd week of May and the weather is finally getting nice. Warmer days, but the changing weather does bring the breezes. For what it's worth, the field has been cut twice now, and the rains are certainly making the grass grow.

I am writing this article a little early as I am heading to Woodruff, S.C. shortly for the big Joe Nall RC flying event. Actually there are 11 of us from the club going so we will have a good representation at the event.

The Compost Site has been generating some negative issues for us. Two weeks in a row some unwanted stuff was deposited in the big brush pile. The first time it was wooden pallets, and the following week it was wooden house siding. Naturally the Village crews discovered it both times and let us know. It did come in on our shifts. **NO MILLED LUMBER INTO THE COMPOST SITE!**

Chuck Roberts, our Compost Director sent out a club wide email message concerning this problem and included photos of the infraction. I went to the Compost Site and met with the loader operator who found this stuff. It's obvious that it's being hidden in the bottom of truck or trailer loads of brush. The Village crews are trying to make it harder to hide the unloading of this debris by changing the access to the brush pile, and when the pile is ground up in a few weeks, they are considering relocating the pile to make it harder to access the back side or blind spots.

I talked with the loader operator about the large logs, branches, tree limbs, etc. that seems to have appeared in the pile. He stated that most of it is brought in by Village crews when they have trees down on the road side, or in the parks. They then try and set this wood off to the side on the north side towards the concrete bunkers where residents can pick

up wood chips or mulch. Residents ask periodically why they can't drop off wood like that. The Village worker said that they put the wood logs, etc. on the north side for people to TAKE HOME for splitting into firewood. In other words, NO big logs in, only take big logs out!

As mentioned at the last meeting, the Village is also going to be posting signs concerning the closing times of the Compost Site. Not done as of yet, but it is coming. They want everyone out of the site at the posted closing time; not letting people in a minute prior to the closing time, and then having to wait for them to unload. As mentioned at the past club meeting, we have been allowed some discretion on this and we can be the "Nice" guys and allow a little more leeway on limiting the access at near closing time.

With the start of the summer field maintenance (Grass cutting), Tryg Smalley could use help in setting up a grass cutting schedule. Contact him if you can help. We try to cut the field on Wednesdays and /or Saturdays due to the Compost site being open and there not being any flying when the Compost Site is open. One or two people can't do it alone. If you like flying off a nicely cut field, be sure to volunteer to help keep it that way.

Coming up on Saturday, June 3rd starting at about 8AM, we will be taking down the shelter walls. This is a Village requirement. With a lot of help, we have been able to do it in 1 ½ hours. It just takes a lot of hands. More at the meeting.

Our next club meeting is Sunday, May 21st at 1 PM, and hopefully we will have some interesting stories about the Joe Nall event.

Fly Safe & Have Fun
Jim Litwin
President

Dennys Stuff

Many of our RRCC members have upgraded or purchased one of the newer Spektrum transmitters for controlling their models. And, many of them are not using the built in benefits of these newer transmitters, in regard to quality of signal levels received by the receiver of your models.

First, a little background on these 2.4 Ghz radio frequencies. (FYI, common audio frequencies range from around 50 Hertz or cycles per second to 10,000 Hertz for those who still have decent hearing)

The old transmitters we used ran on 72 Mhz, or 72,000,000 Hertz. The current 2.4 Ghz radios run at 2,400,000,000, or about 33 times higher frequency than our old radios.

The antenna length of a radio signal is directly related to the frequency. The higher the frequency, the shorter the antenna.

Worse, these 2.4 Ghz radio frequencies are Polarized! What that means isn't relevant, but what the end result is, if the transmitter antenna is pointing up and down, the receiver antenna must also be pointing up and down for maximum signal reception. If the receiver antenna is horizontal, there is little signal reception at a distance away. That is something my Spektrum Analyzer for 2.4 Ghz shows when monitoring an old Spektrum transmitter.

Obviously, that isn't good for our model receivers since they can be in any orientation during a flight.

The older Spektrum DX6i transmitters only had a single antenna, while, the newer Spektrum transmitters and most RC transmitters now days have two antennas inside the transmitter. As an example, the Spektrum DX9 and nX10 transmitters have the obvious antenna out of the top of the transmitter. BUT, there is a second antenna

inside the handle of the transmitter, perpendicular to the top antenna. The transmitter send out the signal some 85 times per second, alternating between the vertical and horizontal antennas.

The receivers on the other hand generally have two antennas. And, one **MUST** be positioned in a vertical mode, and the other **MUST** be positioned in a horizontal mode. The remote receivers must have their antenna's perpendicular to the antennas on the main receiver.

Also note that the information sent out by the transmitter is NOT some analog signal that you can watch with an oscilloscope. Rather, it is a digital "Page" of information, sent out that 85 times per second. Kind of like a page of numbers and/or text.

Buried inside that "Page" of information is security monitoring information. The receiver examines the incoming signal from the transmitter, and checks for any errors in that page of data. This is nothing new, the electronics industry has been using this technology for many decades. It's used in computers, memory cards, hard drives, cell phones, everything. Even one wrong number in a page of data received by the receiver will set off an error in the receiver.

Now, for the important stuff. The newer Spektrum transmitters and receivers allow the user to examine the signal integrity during and after a flight. Obviously, it isn't a good ideal to be looking at this information during a flight. But you can look at this information while range checking your radio system, and AFTER landing your model. **(You do range check new receivers, don't you?)**

As an example, my older Spektrum DX9 transmitter along with the AR8010T receiver with telemetry allows looking at exactly this information. The receiver has three remotes. If you look at the label on the receiver where the remotes are plugged in,

you will see “B”, “L” and “R”. This information is linked to the telemetry screen on your newer Spektrum transmitters.

After a flight with the receiver still turned on, and engine (or motor) off, use the Spektrum transmitter roller bar on the bottom right, and roll it to the right until you see this screen.



FYI, this is a photo taken of Hoss's new Spektrum nX10 transmitter immediately after landing, and before shutting off the receiver in the model. The 4:33 is the time left on the built in transmitter timer.

Note the information on the left of the screen with the letters “A”, “B”, “L”, and “R”. Those letters correspond directly to the same letters labeled on the receiver plug in's for the remote receivers previously mentioned.

So, just what are they? Well, the letter “A” corresponds to the receiver's antenna's, “B” has no remote. And “L” and “R” correspond to the remote receivers plugged into the “L” and “R” inputs to the receiver.

The number “36” by the letter “A” shows that out of the 85 pages of information sent to the receiver every second by the trans-

mitter to the receiver, 36 pages had some sort of error, and was ignored by the receiver. The same applies to the “L” and “R” inputs to the receiver.

Is this bad? No, not really, since with 85 pages of info sent to the receiver every second, a 10 minute flight consists of 85 pages per second times 60 seconds times 10 minutes equals 51,000 pages of information sent to the receiver during that 10 minute flight.

But, there is more. We have the “F” and “H” indications on this same screen. The receiver is monitoring its own antenna's, (“A”) along with the two (“L”) and (“R”) remote receivers.

If the receiver senses even a single number error in one of the pages of information, it immediately looks over the data from one of the remote receivers and checks it. And if that one is bad, it goes on to the last remote receiver. The receiver uses the first good “page” it finds.

BUT, if the receiver fails to get a good page of information from all three receivers at the same time, A, L, and R in this case, we get a count on “F”, or a “Fade”. One or two, or even a dozen “F” fades on a flight is about average. The pilot will never notice it.

The “H” count on the other hand is very serious, especially on the larger models. The “H” count will count EACH TIME the receiver has errors on all signals on all receivers for a consecutive full second during a flight. If you see one or two “H” counts or Holds, your model has a problem.

What's involved, and how to correct this will be published in the June issue.

Denny Vollrath

RRCC editor



Top left, meet our new pilot Ed Jenkins who qualified as an RC pilot recently.

Top right, club member Hoss is rescuing a model that landed in the pile of branches in the compost area. The pilot will be nameless, other than he knows a bit about the compost duty roster!

Bottom left is club member Jason and his new sailplane. This sailplane is a bit special, as it has a full blown kerosene pow-

ered jet engine buried inside the fuselage. The jet blast comes out of the bottom of the fuselage.

And, last, is Jason's "Fly Baby" model that has a wingspan two inches short of 14 feet. It weighs in at 54 pounds. Power is a Valach 210 cc, four stroke engine that swings a 36X14 propeller.

(Rumor has it, Jason will sell/has sold these models)

Military | Scale | Aerobatic | 3D | Helicopters

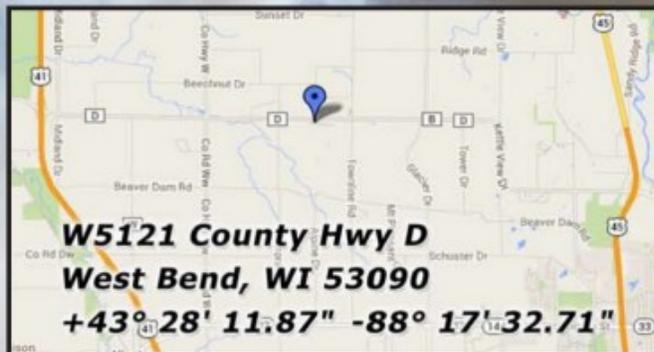
Radio Controlled AIR SHOW



June 24, 2023
8:30 am - 3:00 pm

Rain date June 25, 2023

- ★ Public Welcome
- ★ Free Admission
- ★ Free Parking
- ★ Public Raffles
- ★ Food & Drinks



FUN FLY INFO

Pilots Registration fee \$5.00
AMA membership required to fly
Pilots registration open 7:45am
Pilots briefing 8:15
Flying starts at 8:30



Find us on Facebook!
www.facebook.com/SkyRanchFlyers/

Or visit our website
www.SkyRanchFlyers.com

South East Wisconsin RC Club Events

(This schedule came from the RC Association)

Date	Club	Event
1 * Sat Apr 8	Model Engine Collector's Association (MECA)	Collecto and Hobby Swap Meet
2 * Sat Jun 3	Circle Masters Flying Club at Sussex Village Park	Control Line Open Fun Fly
3 Sat Jun 10	Fond Du Lac Aeromodelers Association	Open Fun-Fly
4 * Sat Jun 24 (rain date Sun Jun 25)	Sky Ranch Flyers	Fun Fly
5 * Sat Jul 8	Bong Eagles	Old Timer Contest
6 * Sun Jul 9	Flying Electrons	Scale Event
7 Sun Jul 9	Racine RC Club	Club-Only Picnic
8 * Sat Jul 15 (rain date Sun Jul 16)	Astrowings of Wisconsin	Charity Fun Fly
9 * Sat Jul 22 (rain date Sun Jul 23)	Southeastern Wisconsin Area Rotary Modelers (SWARM)	Friend Fly
10 * Sun Jul 23	Flying Electrons	Electric Fly In
11 * Mon Jul 24 to Sun Jul 29	Circle Masters Flying Club	EAA KidVenture - Oshkosh
12 * Sat Aug 5 (rain date Sun Aug 6)	Milwaukee Area Radio Kontrol Society (MARKS)	Float Fly DNR Bong
13 * Sat Aug 5	Bong Eagles	All Free Flight Contest
14 * Sat Aug 5	Rubicon Area Flyers	Fun Fly
15 * Sun Aug 6	Circle Masters Flying Club	Annual Control Line Contest
16 * Sat Aug 12 (rain date Sun Aug 13)	Flying Electrons	Airfest, Fly-In Benefit Troop #110
17 * Thu Aug 17 - Sat Aug 19	Fond Du Lac Aeromodelers Association	Warbirds and Classics Over Midwest
18 * Sun Aug 20	Fond Du Lac Aeromodelers Association	Open Fun Fly
19 Sun Aug 20	Racine RC Club	Open House
20 * Sat Aug 26 * Sun Aug 27	Circle Masters Flying Club (might not fly on Aug 26 due to possible car show)	Demo Flying, Sussex Antique Farm Implement Show
21 * Sat Sep 9 (rain date Sun Sep 10)	Flying Electrons	Fly-In and Swap Meet
22 Sun Sep 10	Watertown Aeromodelers RC Club at Watertown Municipal Airport	Open house and pancake breakfast with flying demos
23 * Sat Sep 16 to Sun Sep 17	Flying Electrons	Pattern Contest
24 * Sat Sep 16 (rain date Sun Sep 17)	Rainbow Aero Modelers Society (RAMS) and Southeastern Wisconsin Area Rotary Modelers (SWARM)	Joint Club-Only Picnic
25 * Sat Oct 7	Model Engine Collector's Association (MECA)	Collecto and Hobby Swap Meet
26 * Fri Oct 20 to Sun Oct 22	all clubs invited to participate and promote (possibly at Discovery World)	Maker Faire

For EAA KidVenture, volunteers get free admission, good free parking, a T-shirt, and lunch for about 3 hours of time (with breaks if needed). Contact Chris Sterner.

Laurie will include club events and dates (excluding club-only events) on the Association's Facebook page. Each event will include a link to the club's web site.

Lakeland RC Club is hosting no event this year due to losing their field.

COMPOST SCHEDULE 2023

05/10/23	12-2	Chuck Roberts		
05/10/23	2-4	Chuck Roberts		
05/10/23	4-6	Trygve Smalley		
05/17/23	12-2	Dennis Krzyzanek	Pete Luks	
05/17/23	2-4	Dennis Vollrath	Cal Thomas	
05/17/23	4-6	Arland Matson		
05/24/23	12-2	Steve Knackert		
05/24/23	2-4	Steve Knackert		
05/24/23	4-6	Justin Francisco		
05/31/23	12-2	Steve Knackert		
05/31/23	2-4	Dennis Vollrath		
05/31/23	4-6	Trygve Smalley		
06/07/23	12-2	Steve Knackert		
06/07/23	2-4	Jim Smith		
06/07/23	4-6	Eric Armantrout		
06/14/23	12-2	William Bylsma		
06/14/23	2-4	Ray Fisher		
06/14/23	4-6	Ray Fisher		
06/21/23	12-2	Jason Fisher		Steve Knackert
06/21/23	2-4	Rich Smentek		
06/21/23	4-6	Merv Tridle		
06/28/23	12-2	Jason Fisher		Steve Knackert
06/28/23	2-4	Jim Smith		
06/28/23	4-6	Arland Matson		
07/05/23	12-2	Jason Fisher		Steve Knackert