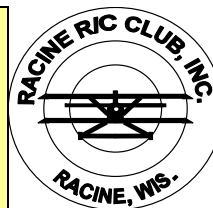




THE FLIGHTLINE



AMA CLUB 668

SINCE 1968

RACINE RADIO CONTROL CLUB INC

WE ARE ON THE WEB

WWW.RRCC.FREEHOMEPAGE.COM

February 2009 Issue

Next Meeting February 15, 2009 at 6PM Mt Pl Village

Club Officers

President

James Litwin
262-637-2787
jlitwin@wi.rr.com

Vice President

Jerry Rose
262-886-0509
thehandyman52@sbcglobal.net

Secretary/Treasurer

William Dollase
262-554-6217
Esall9@SBCGlobal.net

Field Chairman

Randy Ruddell
262-598-0447
rruddell@wi.rr.com

Safety Officer

Jerry Armantrout
262-633-4585
Jerry@Armantrout.us

Tractor Chairman

Eric Armantrout
262-884-4675
Ericandlaura@Armantrout.us

Compost Director

Bruce Rowland
262-633-5254
tacit@wi.rr.com

Webmaster

Paul Willems
262-619-4119
pwillems2@yahoo.com

Newsletter Editor

Dennis Vollrath
262-639-6362
vollrathd@yahoo.com

MINUTES OF JANUARY 2009 MEETING

The meeting was called to order at 6 P.M. by President Jim Litwin.

REPORTS:

President: Jim Litwin passed out copies of the 2009 budget and discussed the items. The income and expenses from 2008 were compared with the 2009 projections.

Vice-President: Jerry Rose reminded us of the club awards banquet to be held on March 7th, 6:00 P.M. at the Charcoal Grill, 8300 Washington Ave. (details in the club newsletter). Reservations are to be sent to Jerry by February 28, 2009.

Secretary/Treasurer: Bill Dollase reported on the club finances. We now have 40 club members for the 2009 year.

Safety Officer: Jerry Armantrout noted that frost bite could present a problem if you fly during the cold snap we are experiencing, in Wisconsin, this week.

Field Chairman: Randy Ruddell reported that the road to the field is not always among the first ones plowed after a snow storm. It is possible to be stuck on the road to the field.

Newsletter Editor: Dennis Vollrath asked if all members had received their Newsletter. If not, be sure to let Dennis know so that he can trace down any problems.

Tractor Chairman: Eric Armantrout reported that all the equipment is safe in the shed. (there were no tracks, in the snow, leaving the building).

Compost Site Director: Bruce Rowland said that all the really good slots are already claimed. Now only the hot days and the cold days are available. But even then, some of those are better days than others, so check the schedule as published on the website and in the hard copy Newsletter and let Bruce know what day(s) you want to reserve for fulfilling this commitment.

OLD BUSINESS: None

NEW BUSINESS:

Selection of persons who will receive awards at the March 7th Banquet. Some of the recipients are selected by nomination/voting and others are selected by a jury of their peers.

Rygasewicz award: Club service - Nomination/Voting.

Craftsmanship award: Skill & proficiency in model construction - Nomination/Voting.

Sportsmanship award: Helping new & prospective club members - Nomination/voting.

Golden Propeller award: Exceptional Service to the club - selected by previous award recipients.

Instructors Award: Outstanding Instructor - selected by peers (instructors).

Nominations were made and voting was performed. The results will be presented at the Banquet. The Golden Propeller and Instructor Award recipients were determined after the meeting per the methods previously noted.

(New Business Continued)

A sum of \$250, to be used to provide prizes for the banquet, was authorized by motion.

Steve Holly made a presentation regarding the acquisition of two types of pins for club members. One pin indicates membership in the Racine R-C Club, and the other pin(s) would be indicative of having achieved certain flying proficiencies. (A motion was carried to table this matter for future discussion).

In addition Steve also presented facts and figures regarding the purchase of jackets which have the club logos, either embroidered or silk screened, on the back. There were two grades of jackets made available. (look for an order form in either this or a future Newsletter).

New Year's Day: 1st flight was made by Jim Furby.

SHOW & TELL:

Eric Armantrout showed his new Sukhoi model. This one is from Peak Model, with a 70" W.S. and an SPE 26 engine. It weighs 10 lbs. Eric is looking forward to getting it up in the air, but on wheels, not skis.

Dennis Vollrath showed a bar stock engine he made. It is a 4-stroke engine, with a spark plug and ignition system. Initially he used gasoline for fuel but now uses denatured alcohol and gets better performance.

Rygasewicz drawing: Merv Sommerfeld won the drawing.

After the meeting, Jim Litwin introduced Tom Ryan, a representative of the A.M.A. Tom addressed the subject of liability and emphasized the importance of training, both for the instructors and the students. Also record keeping and check lists. A careful reading of the A.M.A. information supplied with our membership cards indicates what a model pilot can do to prevent injury to himself, other people or his aircraft. Tom talked about the future of model aviation and how clubs can expand their membership by inviting the public to Fly-Ins, etc.

Noted R-C REPORT MAGAZINE has been shut down. The March issue is the last one. RC Report was hit with a major downgrade on advertising revenue, that resulted in a negative cash flow. They may continue with a website.

Note: The RRCC web page now has a link to the RRCC editors master copy of the "How it works RC radio system". Since the RC Report magazine ***WAS*** going to refer to our web page and the RC radio article, this will no longer happen.

NEXT MEETING: Sunday, February 15th. Mt. Pleasant Village Hall. 6 P.M. Hy. 11 & 31.

Motion to adjourn made, seconded and carried.

JIM'S CORNER

Winter is certainly upon us, but some of our diehard members have been getting their planes into the air and utilizing the warm shelter. The Village of Mt. Pleasant has plowed our road several times, but the wind certainly does try and blow it shut with drifts, so if you do plan to come to the field, watch yourself on the driveway to the field.

The Club Awards Banquet is being held on March 7th so there is still time to sign up if you would like to attend. There is a flyer with details about the banquet elsewhere in this Newsletter.

If you have not paid your 2009 membership dues, this will be your last newsletter. The gate padlock code is being changed on Sunday, March 1st, so send your membership dues to Club Secretary / Treasurer William Dollase.

Winter can be a slow time, so take advantage of it and get that new project started. Spring will be here before you know it.

Jim Litwin
President

Dennys stuff

The last issue of RCReport magazine had a very interesting article on the new 2.4 Ghz radios. For those that did not pick up the March issue, if you can find a copy, it is well

worth reading.

Cal Orr did the testing.

What is totally surprising, is one test they conducted where they placed a number of Futaba and Spektrum transmitters together, then walked away 350 feet with the model transmitter, and flew the model directly over the mix (within ten feet or so!) of Futaba and Spektrum transmitters.

This is as brutal of a test as you can get. The signal strength of the 40 transmitters is several thousand times stronger than the pilot located 350 feet away! None of our existing 72 Mhz radios would survive a test like this. That would be a certain crash of a model. The tests showed that the Spektrum radios came out on top, next, Futaba, and last (way last) was Airtronics. This may not be a reasonable test in the real world, but it does show how resistant our microwave radios are to the model airplane transmitters, as well as everything else out there on the same 2.4 Ghz frequencies.

Cal Orr give very high ratings to the Spektrum/JR #AR 9100 four receiver type radio system. Cal Orr was very impressed by this receiver package. The AR 9100 receiver was pretty much unaffected by everything they did. (But, this receiver is expensive!)

They also found that the range of the full range 2.4 Ghz radios is on the order of three MILES in the air, notably more than the 72 Mhz radios.

Engine Power

Found an old formula about horsepower and propellers. The formula requires a scientific calculator that can calculate y^x values. The horsepower formula is as follows.

$$\text{HP} = (\text{Pitch}) \text{ times } (\text{Diameter})^4 \text{ times } (\text{RPM})^3, \text{ all divided by } 1.4 \text{ times } 10^{17}$$

For those club members that have access to an Microsoft Excel Spreadsheet, let me know, I can email you a copy of the above formula in Excel. As an example, my new Hacker A40-10L motor, running on 5Series, 2 Parallel A123 cells will turn a 15/10 propeller at 6200 RPM. That calculates out to 0.86 horsepower. Motocalc indicates power output is 0.84 horsepower. Pretty close!

The interesting part of this, take the same propeller, and cut it down to 8 inches diameter, same RPM. That calculates out to only about 0.07 horsepower. That indicates that on a 15 inch propeller, the outer 1/2 of the propeller diameter is responsible for about 90% of the horsepower. That's why some of our models with big round cowls can still fly.

New series

How it works: The Ignition System Part 1

This is going to call for an understanding of electricity. So, here goes.

This goes back several hundred years, long before you could go to the local hardware store, and buy a few alkaline batteries, some wire and some iron bar stock. In fact, if you wanted this type of stuff, you had to make it your self. From pieces of metal that you could not get from the hardware store because the hardware store did not exist. In fact, take an average 5th grader as on the TV show, and compare his knowledge to what was known 200 years ago, and he would have been the Einstein of his day.

Two hundred years ago, an Italian character by the name of Galvani found that a static electricity spark could cause a freshly dissected pair of frogs legs to "jump". (A little spooky at the time.) Things led to more understanding when a character by the name of Volta found how to make a battery cell by using pieces of zinc and copper separated by pieces of paper, soaked in brine. This battery cell had little power, but it could move the frogs legs at will.

It was the mid 1800's before batteries could be built that could put out fair amounts of power .

But, using frogs legs were a little inconvenient when trying to measure the power output of these cells. That's when someone discovered that connecting a piece of wire across the battery could cause a near by magnetic compass to move. That's when it became known that electrical current could develop a magnetic field. And, the higher the current, the stronger the magnetic field, and the more effect it had on the magnetic compass. Then, they found that if you made a coil of wire, and inserted the compass inside the coil, it really increased the effect.

Next, they found out something that was a breakthrough at the time. They could take a coil of insulated wire, wrap it around a piece of iron metal, and connect it to a battery. (Of course, they could not buy a coil of insulated wire from the hardware store. They had to make it.) This setup, consisting of a battery, a coil of wire and a piece of iron resulted in an electric MAGNET! Soon as you disconnected the battery, the piece of iron was again not magnetic. Up until this time, the only permanent magnets available were lodestones that were found. Now, with the ability to magnetize certain iron/steel materials, they could make permanent magnets much stronger than those pieces of lodestone.

What came next, is putting a tiny watch escapement spring the compass needle, and putting a indicating needle on it. Now, that needle would rotate against the watch spring while current was flowing through the coil. Bingo, the first voltmeters.

Next issue, we will discuss the typical Multi-meter, how it works and how we can use one in our home and hobbies.

Members of the club have expressed interest in acquiring a "Club Jacket". These jackets are ones with the club logo on the back. Steve Holly had coordinated this in the past, and has made contact with the vendor that was used before. The jackets are available, however at an increase in the price. At our last meeting an example of the jackets were displayed, and options discussed. **THEY ARE NUMEROUS!**

One of the jackets is a nylon lined jacket (Baseball/Coach Style) with the logo embroi-

dered on the back. It has knit waist band and cuffs. Approximate cost is \$68, with sizing, etc. affecting price.

The other jacket is a (Varsity/Letterman) style, with a wool body and leather sleeves with an embroidered back logo. This jacket cost approximately \$210 depending on sizing, etc.

If you are interested, contact Steve Holly directly for more details at 262-638-2559, so it can be determined if there is sufficient interest, and how the final costs can be determined.



Eric Armantrout showed his new Sukhoi model. This one is from Peak Model, with a 70" W.S. and an SPE 26 engine. It weighs 10 lbs. Eric is looking forward to getting it up in the air, but on wheels, not skis.

Eric indicated that this model was shipped directly from overseas, and shipment was extremely fast.

EXTRA NOTE:

Bob Lupia is after a replacement crankshaft for a Supertiger 90 engine, that is about 9 years old. If you can help, contact either Bob, or your newsletter editor.

GREENFIELD NEWS & HOBBY

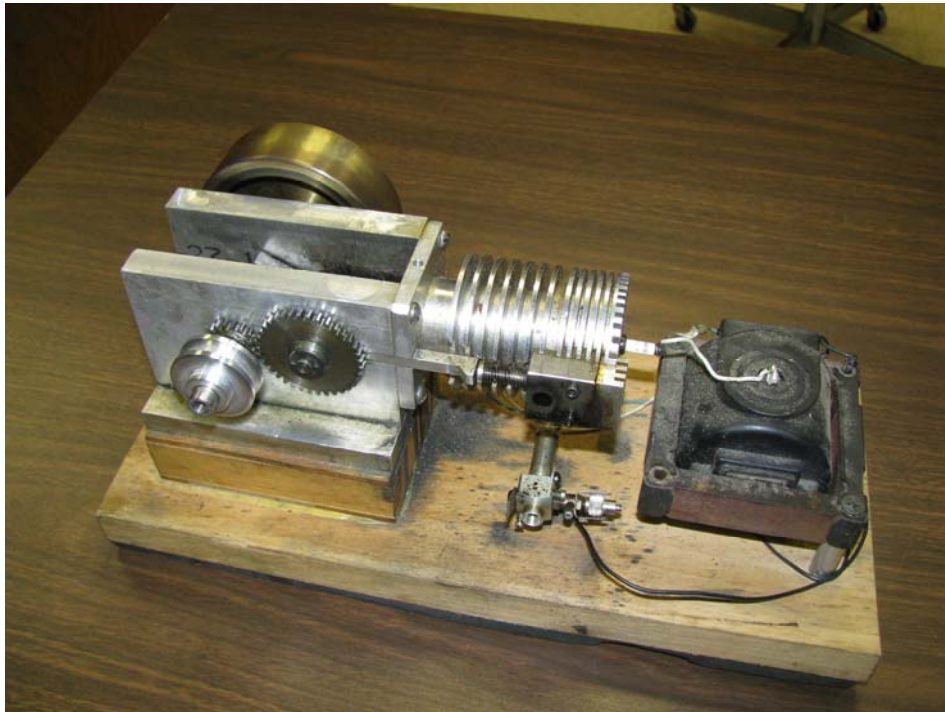
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Dennys Bar stock Engine

Ignition coil is from an old Chevy van, carb is from an old model engine. Ignition points are from Farm and Fleet. Gears were purchased, and modified. Everything else is from "Bar Stock". Rings were machined from cast iron. This engine is about a "75" in displacement. Engine has about 10 hours on it. It requires a 12 volt battery for the ignition system.



Dennys new Hacker A40-10L motor. (These Hacker motors come in "Short" as in A40-10S and "Long" as in A40-10L.) The longer motors can handle a little more power.

What do the two motors above have in common? Well, both are rated at a continuous 3/4 horsepower! Yeah, the Dayton Capacitor start induction run will put out 3/4 horsepower for as long as the bearing last, likely for years. And the pretty purple Hacker A40-10L motor will put out 3/4 horsepower for as long as its bearings last, **NOT** likely for years. Interesting, the information that came with this motor indicates that it has FOUR ball bearings. Also, the Hacker turns over at 6000 to 10,000 RPM, compared to the 1740 RPM of the Dayton motor. If the Dayton motor were used to belt drive a model propeller, you'd have to have an 8 inch pulley on the motor and a 1 1/2 inch diameter pulley on a jackshaft for the propeller.



Photo Taken June 1,
2008 at club field.

Think—Summer will
be here , sometime!

RACINE R/C AWARDS BANQUET MARCH 7

CHARCOAL GRILL AND ROTISSERIE
8300 WASHINGTON AVE.

COCKTAILS 6:00

DINNER 7:00
WOOD GRILLED CHICKEN

BARBEQUE PORK RIB PIECES WITH BBQ SAUCE

\$ 21.00 PER PERSON

SEND RESERVATIONS TO
JERRY ROSE 10832 WASHINGTON AVE.

2009 Calendar of Events

<u>JAN</u>	1	Thu	9:00 AM - Flying Field - "First Flight of the Year"
	18	Sun	6:00 PM Mtg - Village Hall
<u>FEB</u>	15	Sun	6:00 PM Mtg - Village Hall
<u>MAR</u>	1	Sun	Change Combination locks at field
	7	Sat	Club Awards Banquet - Charcoal Grill, Washington Ave, Racine
	15	Sun	6:00 PM Mtg - Village Hall
<u>APR</u>	19	Sun	6:00 PM Mtg - Village Hall
<u>MAY</u>	17	Sun	1:00 PM Mtg - Flying Field
<u>JUN</u>	1	Mon	Winter Shelter disassembled by this date
	14	Sun	1:00 PM Mtg - Flying Field
<u>JUL</u>	12	Sun	9:00 AM - Club Fun Fly
	26	Sun	11:00 AM - Club Picnic
<u>AUG</u>	16	Sun	1:00 PM Mtg - Flying Field
<u>SEP</u>	20	Sun	1:00 PM Mtg - Flying Field
<u>OCT</u>	1	Thu	Last day to submit Rule changes
	1	Thu	First Date that we can assemble the Winter Shelter
	18	Sun	6:00 PM Mtg - Village Hall
<u>NOV</u>	15	Sun	6:00 PM Mtg - Village Hall - Vote on Rule Changes
<u>DEC</u>	13	Sun	6:00 PM Mtg - Annual Mtg - Village Hall - Election of Officers

COMPOST SCHEDULE

	Noon to 2 PM	2 PM to 4 PM		Noon to 2 PM	2 PM to 4 PM
15-Apr	Bob Lupia Gerald Bublavay	Bob Lupia Gerald Bublavay	5-Aug	Dale Mosher Russ Zebell	Dale Mosher Russ Zebell
22-Apr	Gerald Jones Chris Gagnon	Gerald Jones Chris Gagnon	12-Aug		
29-Apr	Richard Gobeli Jerry Rose	Richard Gobeli Jerry Rose	19-Aug	Jim Engholt	Jim Engholt
6-May	Richard Cook John Czarnecki	John Merrill John Czarnecki	26-Aug	Ron Dixon GaryAnderson	Ron Dixon Eric Armantrout
13-May	Shel Berman Paul Willems	Jim Litwin Paul Willems	2-Sep	Jim Furby Keith Bushka	Jim Furby Keith Buschka
20-May	Shel Berman Bill Dollase	Jim Litwin Bill Dollase	9-Sep		
27-May	David Czarnowski Richard Cook	David Czarnowski John Merrill	16-Sep		
3-Jun	Merv Sommerfeld Dennis Vollrath	Merv Sommerfeld Don Dalziel	23-Sep		
10-Jun			30-Sep	Steve Kozlik	
17-Jun	Jerry Armantrout Gary Anderson	Jerry Armantrout Eric Armantrout	7-Oct		
24-Jun	Larry Danko Randy Ruddell	Larry Danko Randy Rudell	14-Oct		
1-Jul	Roger Olsen Jim Strelitzer	Roger Olsen Jim Strelitzer	21-Oct	Steve Kozlik	
8-Jul	Curt Sommerfeld Dennis Volrath	Curt Sommerfeld Don Dalziel	28-Oct		
15-Jul	Jerry Clements Steve Holly	Jerry Clements Steve Holly	4-Nov		
22-Jul	Brian DelCampo Dick Delany	Brian DelCampo Dick Delany	11-Nov		
29-Jul	Mike Shane Ralph Mohr	Mike Shane Ralph Mohr	18-Nov		
			25-Nov		