

MARCS Sparks

JANUARY 2011

VOLUME 50 ISSUE 1

Monthly newsletter of the
MADISON AREA RADIO CONTROL SOCIETY
Madison, Wisconsin AMA Charter #665



COME FLY WITH US...

The MARCS' meetings are held on the first Thursday of each month at:
MADISON LABOR TEMPLE
1602 South Park St. Madison, WI.
7:00pm room #201B

Visitors are always welcome. We think we have a great Hobby and we invite you to come and see, and consider joining us.

Club Officers:

President: Brad Witt.....bwitt@chorus.net
Vice Pres: Danny Sutter.....stodan@merr.com
Secretary: Don Weigt.....d_weigt@sbcglobal.net
Treasurer: Dick Sutton.....jdsutt@mhtc.net

Membership information (more details on page-9)
Dick Sutton phone: (608) 437-6795

Flight instruction coordinator:
Conrad Tufte conradtufte@gmail.com

Web master:
Jeff Alexander webmaster@marcswi.org

Club photographer:
Otto Oie ooie3@charter.net

Club safety officer:
Bill Kinney hukilau@centurytel.net

Club website: ----- www.marcswi.org
Info."About us", our "Flying sites", "Newsletters" (present and archives), a calendar of events, "Pictures & Videos."
Contains links to: "War Birds" "Electric Flyers" & other special interest groups. Membership application forms for the **MARCS** club and the **AMA**.

Newsletter Editor
John Steen steensr@yahoo.com

Minutes of the:

MARCS General Membership Meeting

December 2, 2010

Submitted by: Don Weigt, Secretary

The meeting was called to order at 7:02 P.M. by President **Brad Witt**. There were 29 people present, including three guests. No new members were present.

Secretary's Report: The minutes of the November meeting were approved as published in **SPARKS**.

Treasurer's Report: A printout of Treasurer **Dick Sutton's** report was available for viewing. Final paid up membership for 2010 is 92. Dues for 2011 were being accepted. Pay in 2010 and save five dollars. Paid up membership for 2011 is about 25.

OLD BUSINESS:

Work Day, Saturday, November 6: **Brad** thanked the large group who showed up to get the wood on the shelter, snow fence around the runway, and dirt moved.

Indoor electric fly, November 27, Janesville Craig high school: **Brad** thanked **Dave Rush** for arranging an indoor fly at the Craig field house on Saturday. It sounds like there were quite a few flyers, and they had a good time.

Elections: **Brad** again expressed his and **MARCS** thanks to all the candidates who ran for the Board.

Lost plane: **Dennis Peterson** lost a Skyraider with gray finish in the swampy area east of the field. He found its wing in a trash can at the field some time later. Last we know, the fuselage with the engine and radio has not been returned, and may still be lost. **Brad** asked if anyone at the meeting had found it. There was no response. Please keep an eye out for it if you go into that area east of the field.

Club forms: **Brad** has new 2011 **MARCS** and **AMA** membership application forms for the hobby shops, and also has new triple folds from **Ed McDonald**.

New Year's Day Tom Lazar Memorial Chili Feed and Fun Fly: Come on out! The flying will be from about 9 a.m. to 1:30 or 2:00 p.m. **Editor John Steen** is making the chili again. **Tony Kremm** is bringing the desserts again. **Brad** is bringing three coffee makers

and extension cords. There usually is hot water and cocoa mix. Some of the Board will bring heaters. We won't have Charlie's to use. The plastic on the shelter will be put on sometime the week before.

Main raffle prizes for the next few months: Brad announced air-planes will be the main prizes for January and February. No raffle in March, it's the club swap meet. In April it will be an ASP 1.20 engine or E-Flite 370 electric motor.

Award Nominations needed for the banquet: Awards are: **Smoking Hole, Submarine Commander, Tree Chopper, and Scooter.** Also, the club gives certificates for outstanding achievement. Explain or send nominations and why they are deserved to **Brad** or any officer or Board member.

NEW BUSINESS:

New Indoor RC Flying Club: **Dave Rush** announced that he has organized the Cougar Indoor Electric Flying Club at Janesville Craig HS. He has two members so far, from the band. He has other prospects. Having this club with student members makes it much easier for school officials to approve using the field house for indoor flying, as well as being a great opportunity for the students. Hobby Horse will donate a Multiplex receiver to each club member. The club may affiliate with **MARCS**, or be independent. **MARCS** may include the field house as one of its insured sites. Meanwhile, **AMA** membership is required to fly there, so the school is protected by all flyers having individual coverage. The Board will need to discuss it.

Possible Labor Temple replacement: Brad announced that the Labor Temple may be replaced in the next 12 to 18 months. The decision will be made in the January to April time frame. The property is one site in competition for a new clinic. If the winner, a new Labor Temple will be constructed closer to Park street, and usable before this one is torn down. Our meetings would be uninterrupted. New meeting rooms would be on the ground floor, with easier access and better climate control. The only down side would be a modest increase in the room rental.

Next year's events: It's time to think about club events for next year. We need to apply for sanctions and get the dates registered, and the sooner we do, the better. Let **Brad** or the Board know if you want to organize an event.

New location for R/C Performance: Brad announce that R/C performance has moved. Their new store is on Monona Drive, about 4 blocks north of the Beltline, on the east side, at the top of the hill.

Future meeting programs: DVDs. Also, someone has requested a program on soldering, both electrical connections and things like landing gears. This could be helpful to many of us.

New gate proposal: **Dave Rush** reported on preliminary meetings with Parks personnel. He explained the lack of public access to this City public park, and confusion with our mixing with landfill traffic. Only about 125 feet of grading and gravel would be needed to give

access from an existing gate off AB. Signs would need to be changed to direct visitors to the new gate, and some gates on the landfill site would best be moved. The Parks people seemed receptive, will investigate, and contact the landfill management. In addition to moving the gate off the busy highway, people could get to the field by AB or Femrite drive without having to get onto Hwy 12/18 at all, which some of our members would appreciate. **Dave's** prior meeting with County landfill management indicated they had no particular position about our access. If this worked out, we could leave the gate open anytime someone is at the field, making it much more accessible to the public, and the swinging gate would be much easier for club members to open and close. The new way in would cross the cross country running route. No flying would be permitted the few times a year when cross country meets were taking place. We shouldn't be flying then, anyway, as the runners pass through **MARCS** parking lot and go into the wooded area west of the runway.

NEARBY EVENTS:

Big Birds meeting: December 9, Thursday, J-J's Top of the Swamp, about 11:00 or 11:30 a.m.

Indoor electric fly: December 11, Saturday, 5 to 9 a.m., Janesville Craig high school. **Dave** announced another indoor flying session for December 11th. The field house will be available for 4 hours. Fee is a \$10 donation to the Craig Band scholarship fund. Visitors are welcome to watch for no charge. **Dave** will have a few spare models for people to try indoor flying, some of which can be bound to your DX7 compatible transmitter. It's about a 45 minute drive from the Labor Temple. "Come on down!"

Dawn Patrol Breakfast: December 16, Thursday, 8:30 a.m., Elies Restaurant (formerly Prime Table) 4102 Monona Dr.: Share breakfast and visit with your fellow club members and flying buddies.

Indoor flying: December 18, Saturday, Hononegah HS Dome, North entrance, 600 East Union Street, Rockton, IL 61072:
<http://www.rvrcflyers.com/Flyers/Dome%20Fly%20Flyer.pdf>

WarBirds meeting: December 21, Tuesday, 7 p.m. Labor Temple, possibly Room-109, if not there, check the other rooms on the first floor. The group will be meeting monthly this winter, the third Thursdays in January and February, the third Tuesdays most other months. Watch here, check at **MARCS** meetings, or contact **Todd Giesfeldt** or **Don Weigt** for dates and room number.

Editors note: See *WARBIRD's* ad page-6 of this issue for changing weekdays, dates, and room numbers for these upcoming meetings.

RAFFLE WINNERS:

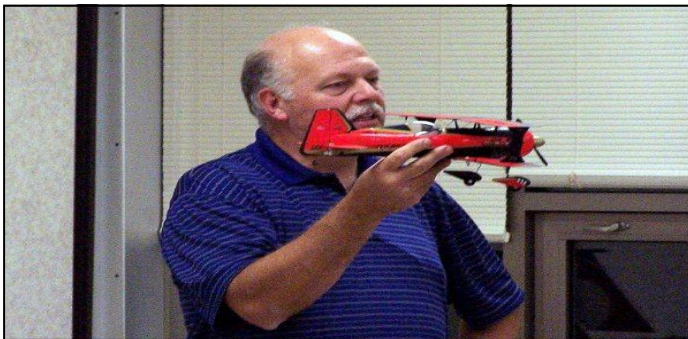
Harley Nelson.....Roll of **Cub-Yellow** MonoKote
 Tony Kremm.....2~X-ACTO saws (from Jerry Buss)
 Ed McDonald.....Real-Flight simulator
 Dave King.....Transmitter case
 John Steen..Aluminum(inch/metric)yard-stick
 Otto Oie.....Roll of **Yellow** MonoKote

SHOW AND TELL:

Bill Kinney: Very light nice looking Piper L-4 observation, with invasion stripes. The 53-inch wingspan model weighs only a pound and a half, with an OS .15 for power and 4 channel radio with micro servos. **Bill** got it on eBay.



Dave Rush: Flyzone Albatross, 14.5 inch span, 1.1 ounce, 130 mAh single cell LiPo battery, 3 channels. about \$72 at Hobby Town in Rockford. **Dave** says it flies well in the gym.



Dave also showed: Mini combat he built of foam sheet, with GWS LPS drive, weighs 3 ounces, uses a small 2S LiPo and two servos for elevons. This is one of the planes you can fly at the Craig field house on the 11th.



Dave also showed: Micro Beast 14.7 inch span 3D biplane, weighs 2.4 ounces with small brushless motor and 2S LiPo. **Dave** said this does double snap rolls in the time he expected a single one!

Visitor; Kevin Twardowski from Beaver Dam showed: A dual K&B glow powered ducted fan plane he acquired. Kevin has only flown an electric helicopter, and was looking for help with figuring out this plane.



PROGRAM: No program tonight.

NEXT MEETING: Will be on Thursday, January 6, at 7 p.m.

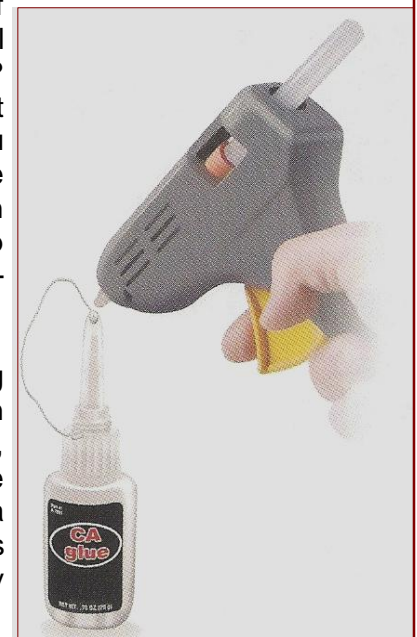
THE MEETING ADJOURNED AT 8:15 P.M.

PHOTOS BY **Otto Oie**, CLUB PHOTOGRAPHER

Keep that cap on a short leash

Have you ever had a problem finding that glue bottle cap? Have you ever mixed up the epoxy bottle caps and later found one of your epoxy bottles full of cured epoxy? Geez, I have and bet there are a few of you that have been there too. Now you can keep track of that cap with this simple solution.

Cut a 4~6-inch long string, depending on the size of the bottle, and attach it to the bottle and cap with a hot glue gun. Now its cap will always stay with its bottle.

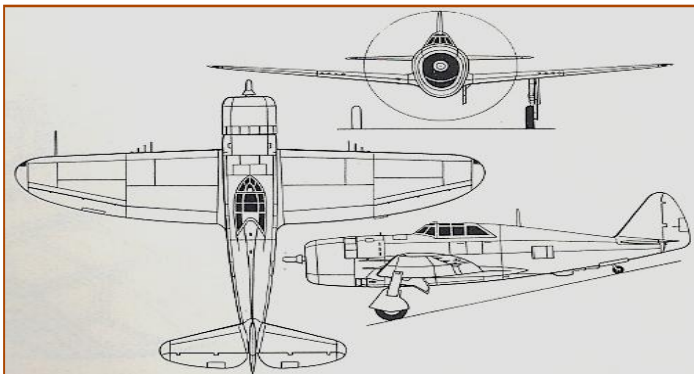


BUILDER'S Work Bench

ALUMINUM METAL FINISHING FOR SCALE MODELS

BY GEORGE LEU

Before you decide on an aluminum finish, I recommend you find an aluminum finished subject aircraft at an airport or obtain a set of photographs and familiarize yourself with the plane. Are there a lot of compound curves that need to be covered? Are there many small panels or a few large panels? How much of the surface is going to be painted? You should ask yourself a number of questions because the answers will challenge the depth of your commitment.



One of the most important aspect of all good finishes on a scale model is the preparation of the models surface for covering. Whether you use paint or an iron-on/rub-on product, the finish will only be as good as the care you put into the surface preparation prior to your final covering. While an iron-on surface may seem to be a time saver, if you want a good looking aircraft, you will spend as much time with surface preparation as you would a paint surface. There are no shortcuts.

There are certainly many types of aluminum finishing products available today. Some of the more popular products consist of adhesive backed aluminum tape-like products, which are applied directly from a roll or sheet, to the surface being covered. These offer the ease of finishing since they adhere well to a primed or bare surface and can be cut to match the shape of scale panels.

Iron-on products such as Chrome MonoKote can provide an excellent metal covering effect. After scuffing the surface to which you are applying the material with 80-100 grit sandpaper (to allow room for trapped air to escape) this material can be ironed on to fiberglass or wood fuselage and look very scale like. I would caution you that this technique requires a good deal of practice and patience. The fact is I have bought many types of aluminum covering products and found them all to be as good as advertised... but each has its own peculiarities.

My personal reason for having so many different varieties of aluminum finishing materials in my stockpile is because no matter how they are advertised, each product has a particular "metallic" effect when used in conjunction with other aluminum products. These subtle differences which are the result of manufacturing techniques, cause "unique" effects which lend themselves well to resemble what a metal finish looks like on a full size aircraft.

My premise that two pieces of aluminum tape, from different suppliers, will be very different looking when they are cut into panels and placed adjacent to each other on your aircraft should not be considered an end point to using the materials. I use a fine grit Scotch-Brite pad to rub the surfaces of various panels (not every panel) to bring out a particular burnished effect to the surfaces. If I were to change my Scotch-Brite pad to a piece of #000 steel-wool, I would obtain a *similar* effect, but not the *same* effect.

The key to scrubbing a panel with an abrasive pad is that you must mask off the individual panels and rub in one direction only. Your choices are to rub at 90° or at 180° directions to the panel edges. If you rub in both directions or in circles, the effect will be lost. My suggestion for practice is to place a 1" X 2" aluminum panel on the bottom wing of a sport-plane. Place masking tape around the edges to protect the surrounding area and practice the procedure. If you like what you see, make another panel at another location on the wing. After that, try another product and check out its final finish. The key to success when working with aluminum materials, is to not be afraid to mix and match various aluminum product brands on your aircraft. I also like to have you practice on a sport aircraft to develop the "feel" of the finished product after you're done.

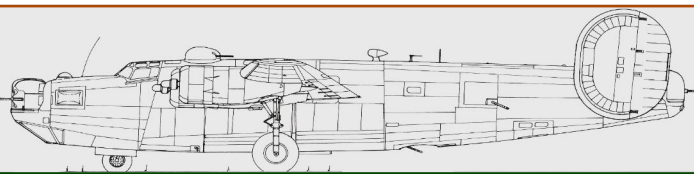
ALUMINUM FINISHING

I am a firm believer of taking the “path of least resistance” when working with aluminum tape or iron-on products. There are specific areas of an aircraft fuselage with more compound curves than I am prepared to negotiate with rubbing or heating of particular products. If it is too difficult to heat a piece of MonoKote to form around a surface, I use paint. Aluminum paints are also unique. Each particular brand can state it is an aluminum color, but when sprayed in panels or on curved areas adjacent to metal tape, the color is often different enough from the stick-on products to give a subtle difference. Even painting a plane using two or three brands of aluminum paint will give you a very interesting and contrasting finish.

This lends to another area of working with metal-like products. You can certainly spray paint over an aluminum stick-on panel, but if you know where your painted surface will be on a plane (along a panel joint) you can paint the color on the primed fuselage and align the stick-on panels up against the paint-line. This has an advantage of saving weight, but it also gives you the freedom to use high strength masking tape (the green “Frog-Tape”) to insure your paint-line has no “leakage” from applying paint, and you do not have to worry about pulling up the under-surface when pulling off the tape.

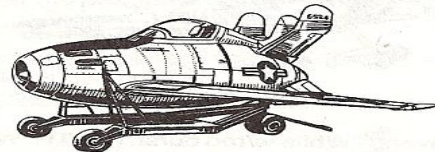
I recently received a prototype MIG-17 jet kit to build and finish in an aluminum scheme. To my surprise, the surfaces had the panel lines scribed on the fuselage and wings. After checking the panels with a 3-view and a set of photos, I have decided they are accurate and I merely have to apply the covering material to the particular panels and trim the edges. This feature provides a significant advantage in finishing. The hardest part was done right out of the box, and all I have to do is determine the compound curved areas and paint them before adding the remaining panels with a stick-on/iron-on product. There is certainly an advantage to finishing a kit like this with a metal covering.

In conclusion, if you want to try something different,



an aluminum finish will give you not only a challenge, but afford you many opportunities to perfect your covering techniques. As I close this article, I remind you that while I have discussed some general covering ideas for an aluminum finish, the plane will require rivet detail, weathering, stencils, and various other applications to be completely done.

GOOD LUCK WITH YOUR EFFORTS



Structural Strengthening

ALLOW THAT LANDING GEAR TO FLEX

With the advent of the electric powered models well under way, there have been a lot of new words that have crept into our language. Not only new words, but a new way of thinking about the aircraft in this class. Now instead of talking about how many pounds our aircraft weighs, we speak of ounces and grams of weight.

One of the sub-groups of these electric flyers are called “Foamies.” These light-weights bring to the arena their own set of problems; their structural strength being one of the big ones. You can usually expect some down time when you bounce one off the ground in a not-so-perfect landing.

Being lightweights, they are very susceptible to air currents and downdrafts when throttling back for your landing. The landing gear is the first to show damage to the fuselage. You can, with very little work, remedy this weak spot.

Snip-up a small amount of fiberglass cloth so you end up with the threads, not cloth. Now mix up some epoxy stirring these thread-strands into the mix and apply it to the area where the landing gear enters the fuselage. This will reinforce that shock point area and will now probably out live the aircraft. By going to larger foam wheels will also greatly help dissipate that impact. Be sure to recheck your Center-of-Gravity when you're finished.

JOHN/EDITOR

WarBird MEETINGS

@LABOR TEMPLE

DECEMBER-21 — TUESDAY — ROOM 201C
 JANUARY-20 — THURSDAY — ROOM 109
 FEBRUARY-17 — THURSDAY — ROOM 109
 MARCH-15 — TUESDAY — ROOM 201B
 APRIL-19 — TUESDAY — ROOM 201C
 MAY-17 — TUESDAY — ROOM 201B

Notice weekday and room number difference

January-6

General Meeting

RAFFLE PRIZES

'Midwest'® **"CARDINAL SQUIRE"** KIT
 74-inch wingspan ~ for 40-60 engine

'PLANO'® 6-Drawer tackle box
 with airplane parts and goodies

small **FLIGHT-BOX**

'HANGER-9'® **Wing Rack**
(Donated by Stuart Schultz)

'ROBART'® Incidence Meter

'COVERITE'® Covering Iron

PROP' WASH CLASSIFIED ADS

FOR SALE

TIGER MOTH

de Havilland

70 SAITO 4-Stroke
56-INCH WING SPAN
WITH ALL SERVOS

\$250.00 (OR MAKE OFFER)

Don Fadness

(608) 222-1950



FLYS GREAT!

2011

NEW YEARS DAY

TOM LAZAR MEMORIAL

HOT CHILI & COLD FUN-FLY

Serving begins approximately 10:00am
 Hot Chili ~ Crackers ~ Grated Cheese
 Coffee ~ Apple Cider ~ Hot Chocolate
 Sinfully Good Deserts

@ KETTLE FIELD

TIP of the MONTH

HANDY CUTTING SURFACE

WHEN I FIRST STARTED BUILDING MODELS IN 1949, SILK TISSUE WAS THE ONLY COVERING MATERIAL AVAILABLE TO COVER THE STICK MODELS. WHEN I RETURNED TO THIS HOBBY IN 2005, THAT HAD ALL CHANGED.

NOW WITH THE IRON-ON ADHESIVE-BACKED AND PRE-COLORED SHEETS IT WAS A WHOLE NEW CHALLENGE. IT DIDN'T TAKE LONG TO FIND WHAT WORKED THE BEST FOR ME TO MAKE CLEAN CUTS AND ELIMINATE WASTE.

I FOUND THAT USING A SEWING MAT TO CUT THIS NEW MATERIAL ON WORKED REALLY SLICK. THEY ARE AVAILABLE AT HOBBY-LOBBY AND MOST FABRIC STORES.

BEST OF ALL, THEY HAVE A GRID PRINTED ON THEM. LINE UP ONE EDGE OF THE COVERING ALONG A GRID LINE, THEN USING A STRAIGHT EDGE YOU CAN CUT PIECES OF NEARLY ANY SIZE WITHOUT MEASURING AND MAKING MARKS ON THE COVERING. THIS SPEEDS UP THE WHOLE JOB AND CREATES NICE STRAIGHT LINES.

JOHN/EDITOR

HHS Dome Flys:

Hononegah High School, Rockton, Il. 61072

HVRC Flyers will be hosting the popular HSS Dome Flys again this year. Season passes can be purchased at Hobby Town, at their monthly meetings, or new this year as a Pay-Pal option.

\$45.00 3-pack multi-pass (can be used by multiple pilots. 1-pilot=1-admission star-punch)(must be purchased by Jan. 8th. \$20.00 walk-in pilot for each event. Spectators are always FREE.

event dates; Jan.-8, Jan.-29, Feb.-19

event Times; 6:00pm~9:00pm

<www.RVRCFlyers.com> <rvcflyers@charter.net>

LOST PLANE

"SKY RAIDER" 40-size with gray basket-weave covering. OS 46AX engine and JR radio-receiver. Plane went down on the East side of our *KETTLE FLYING FIELD*. Wing only has been found. Please notify:
Dennis Peterson 608-838-3577 THANK YOU

Custom DRILL BIT made to Order...



...and I made
It myself !

Need a small, long drill bit? Not a problem if you have some different-size piano wire standing around in a bean-can on your bench somewhere. I like to use a digital caliper to measure the diameter of the wire. Once you have the right size in your hand, cut it to the length to do the job you're trying to do and then flatten two sides with a hammer and another steel surface, back about a half an inch... as shown in the picture. Then with the help of a grinder or Dremel tool, clean up the swedging (diameter) caused by hammering the flatness and create a tapered point to it. Now sharpen the point as you would a drill bit and you have a custom drill bit to use for your job. When your done, add it to your collection of drill bits. Do the same with several different sizes of piano wire and they will be ready the next time you need a small long bit.

RENEWAL TIME

RENEWAL TIME

PAYING YOUR MARCS
"MEMBERSHIP DUES"
BEFORE JANUARY 1ST
SAVES YOU \$5.00

DAWN~PATROL BREAKFAST

Thursday, Jan. 20th
8:30 am

ELIES' FAMILY RESTAURANT

4102 Monona Drive
(At: Buckeye Road)

Monona, WI.

(FORMERLY PRIME TABLE)

2011-Club Events

Event	Date	Location
TOM LAZAR MEMORIAL <i>HOT CHILI & COLD FUN-FLY</i>	January-1 (10:00am~2:00pm)	Kettle Field
MARCS ANNUAL SWAP-MEET	March-3	Labor Temple
MARCS ANNUAL <i>Banquet</i>	April (TBA)	Maple Leaf
WAR-BIRDS OVER DANE	June-11	Kettle Field
ELECTRIC 2011 FUN-FLY ⚡ Special 2-day Event ⚡	July 9 & 10	Kettle Field
MARCS 2011 FLOAT-FLY	(TBA)	(TBA)
KEN KINDSCHI MEMORIAL <i>Scale Rally</i>	August-13	Kettle Field

Post Season Blues

— PART-1 —

Well, since we've had our first snowstorm and we are dressing rather different these days, I guess the general flying season is officially over for most of us. Oh, we still have some hard-core guys that try to and do fly each month of the year, but those are exceptional people... to put it in a polite way.

Eventually we'll stroll back into our hobby zone in the garage, basement, or workshop and assess the damage and mishaps to the planes in our fleet. This should have been done already, but the holidays ya know, just overtook you. We really need to take out the glow-plug and get some after-run oil down into the cylinder and rotate the prop slowly to get a good coating on the cylinder and the piston. A little extra in the Carb' and the cylinder that opens and closes it is a good thing too. Reinstall the glow-plug. Wrap a light rag around the engine and put a rubber band or two around it to keep it dust and debris free. This will take care of the engine for the next few months.

It's time to inspect the airframe and the control surfaces next. I usually grab a pad and pencil for this job and I will make a separate sheet for each airplane. This job will be two-fold. Using your bottle of glass cleaner (or whatever you use) and some paper towel, clean the entire surface of the plane. As you do this, inspect everything that moves and if there is something that's not just right, note that on the sheet.

Don't do the repairs just yet or you'll loose track of what you are doing and overlook something else. Just inspect and make note of it in this very important step. This will also draw your attention to the outer skin of the aircraft and like everything else, make a note of the repair that needs to be done on *that certain place* of the aircraft... even if it's a small puncture, write it down.

Don't get overwhelmed if your list starts to gets long or if it includes a repair that you've never done before. Put it on the list anyway. In the next issue, we'll go through a list of common repairs and how to deal with them. Don't worry, they'll be easier than you think. Knowledge will be your power. *John/editor*

BOARD of DIRECTORS Meetings

These meetings are held on the same evening as the monthly General Membership meeting, shortly after its adjournment.

General Membership meeting: 7:00~9:00pm

Board of Directors meeting: 9:00~10:00pm

Both meetings are held in room: 201-B. Club members are welcome to stay and observe the meeting. A Club member may have the floor by being recognized by the Chairperson. Input and/or opinions must be brief and to the point, as the overall meeting time is limited.

Agenda: January 6, 2011

SHELTER HOUSE

WELCOMING NEW BOARD MEMBERS

RASCAL-110 STATUS

NEW FIELD ENTRANCE STATUS

2011 FLOAT FLY LOCATION

ISSUES FROM THE GENERAL MEMBERSHIP

M.A.R.C.S.

Madison Area Radio Control Society

Annual Membership Dues

Regular membership	\$60.00
Junior membership	\$25.00
Park Pilot membership	\$25.00
Family membership	\$20.00
Associate membership	\$20.00

All applicants for a **MARCS** membership must show proof of their **AMA** membership at that time.

To receive the club's monthly "**NEWSLETTER**" by regular first-class mail, rather than off the Internet, please add \$10.00 to your annual fee.

Treasurer: Dick Sutton
612-South First Street
Mount Horeb
WI. 53572

Brodhead INDOOR FLYING

HIGH SCHOOL GYM

WEDNESDAY EVENINGS 7:00~10:30

(OCTOBER 20th, 2010 through APRIL 27th, 2011)

Pilot's cost: Free (PLEASE CONTRIBUTE \$10-\$20 OR MORE FOR JANITOR'S GIFT)

No flying on December 22nd and 29th due to student Christmas vacation.

No flying if school is cancelled or released early due to bad weather.

Rules:

6-oz. weight limit; Electric, CO2, or rubber powered
 6.5-oz. weight limit; with protected prop.
 Other rules; Flight-Line, Rest-room location, Children rules available on site. Spectators are free.

No AMA membership required

<http://www.facebook.com/pages/Brodhead-Indoor/160588840650921>



Help Support the
 Madison Area
HOBBY SHOPS
Buy Locally