



MARCS Sparks

MAY 2010

VOLUME 49 ISSUE 5

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:

Ozzie Johnson phone: (608) 274-0474

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**.

Minutes of the:

MARCS General Membership Meeting

April 1, 2010

Submitted by: **Don Weigt, Secretary**

The meeting was called to order at 7:05 P.M. by President **Brad Witt**. There were 33 people present.

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

Treasurer's Report: A printed copy of Treasurer **Dick Sutton's** report was available for viewing. Paid up membership for 2010 currently is at 75. New members **Michael VeDepo** of Sun Prairie and **Daniel Osborn** of Madison introduced themselves and were welcomed. Michael is new to the area, but has been flying for about 24 years. His favorite model types are large aerobatic planes, WarBirds, and turbine powered ones.

OLD BUSINESS:

Schultz Sport and Hobby: **Brad** told the members that **Charlie** has been ill. Call before going, to make sure he's open.

2010 Banquet, Wednesday, April 7: Forms were available. **Dave Rush** was collecting forms and fees. This was the deadline for signing up. Thirty eight were registered.

2009 Awards: Nominees are needed and nominations are still open for Outstanding Service awards. Members were invited to see **Brad** to nominate people.

Sunday, March 14: Indoor flying at Janesville Craig High School. **Dave** reported those who attended had a good time, and didn't smash too much that they couldn't fix on the spot. There may be one



Newsletter Editor
John Steen steensr@yahoo.com

Minutes continued from page-1

more indoor session this spring, depending on the weather. **Todd Giesfeldt** was there and got in lots of flying with his Vapor, maybe more than he flew all last year! There were indoor mini combat models, too. Come down next time, even if you don't have a plane. Someone will hand you something to fly.

City Contract for the Field: **Brad** has received the City, contract, signed and returned it. When he gets the final copy back, he will give them the check for the year's fee, and the **AMA** insurance certificate.

NEW BUSINESS:

It was announced that **Rod Lippert** had died this past week. He was 83. There was a card for his wife, Marleen, at the front table for members to sign.

Brad mentioned Dustin Buescher's pictured in the June 2010 issue of Model Airplane News on page 54. **Dick Buescher** said it's Dustin's plane on the cover too. Although he wasn't given credit for it in the magazine, **Dick** took the picture on page 54 .

FAI Raffle Tickets: We have some tickets for sale, for those who wish to help support the modelers going to the international competitions. The funds are used to help pay their travel expenses. See **Brad** if you wish to participate.

Field/Shelter/Runway: Tomorrow, Friday, April 2, 1:00 P.M., come out to the field if you can, and help take the winterizing boards off the shelter and remove the fence from around the runway and store them for the flying season. The forecast is for good weather then, and wet weather all next week.

NEARBY EVENTS:

Saturday, May 1: Great Planes auction at Champaign/Urbana IL. Advertising indicates there will be 200 planes for sale.

RAFFLE WINNER:

Only one prize this month.

Dremel Tool (complete kit) - **Dan Osborn**.

SHOW AND TELL:

Dave Rush showed a simple 24 inch span 11 ounce foam Blue Ray racer he built from a kit bought at the E/xpo event at the Unidome in Cedar

Falls, IA. <http://www.bhrcp.org/blue_ray_pylon_racer.htm> or <http://expodom.org/race_rules.htm> for details. The planes are based on a German design. **Dave** said they are fast and inexpensive fun. His used a BL-2208-12 motor and 18A brushless ESC. For lowest



cost, you could get a motor and ESC from Greg Sutter, Hobby City 2 cell 950 mAh battery for less than \$10, and Hobby King aileron and elevator servos that cost \$3 each, with no rudder control. The kit costs \$25, with a hot wire cut airfoiled foam wing. **Dave** had a couple of them for sale at the meeting. The one he showed took an hour and a half to build!

Danny Sutter showed his WWII Nakajima "Rufe" float plane with a big single float and small tip floats.



The 24 inch span model began as a GWS kit, and features homemade floats and weighs 19 ounces without battery or receiver. The canopy and cockpit is hinged to give access to the battery. **Danny** especially likes the mauve color. The model uses one of

Greg Sutter's brushless motors and ESCs.

Gary Gausmann showed his 'Miss Dara' racer he built from a kit, (that was one of our raffle prizes). The fuselage is a box with wood added to make the final shape. The assembly sequence didn't work well, with the motor mount being installed first. Later, the side of the body is cut away, making a hole to install the engine. It required removing too much, including part of the bottom. **Gary** rebuilt the nose around the engine. The engine is in there: it's



not coming out for the life of the model! The 35 inch span model has four servos, weighs 2.95 pounds and is powered by a Magnum .15. The

Minutes continued from page-2

gear needs to be bent inward for more prop clearance. As it is, the prop hits the ground when the plane is level. When it's ready for its first flight, his Hitec radio will control it.

Frank Baker showed his scratch built British 1927 Short Singapore twin engine flying boat. The 68-inch wing-span model is powered by two OS .26 4-stroke engines. The complex fuselage and sponson



shape was made by soaking thin sheet balsa in water until soft, then wrapping it around the formers. Radio is a Futaba 4 channel. Two of the hardest parts of building the model were getting the engine nacelles lined up properly when mounted on the struts, and hiding the servo leads from the fuselage to the strut mounted engine nacelles and wing. **Frank** eventually chose to route the servo leads right along the struts. The elevator control linkage to the horizontal tail mounted high on the vertical tail was also a challenge. **Frank** made 72-inch copies of his plans at Kinkos. Covering is one roll of silver Solartex. That's all of it **Frank** had, and he had to skimp to make it cover everything. He had just a two inch square of it left over when he finished!

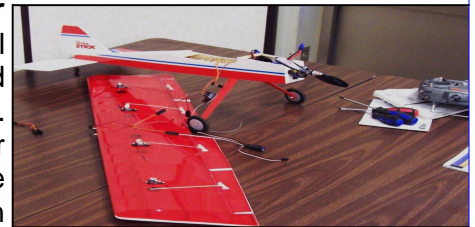
Brad Witt showed a couple of OS .91 two stroke engines. They had different needle valve mounts. One was mounted on an integral cast arm and body that was part of the back-plate. This has proven to be a problem. It can heat the fuel enough to vaporize, causing erratic running.



The other engine has a newer arrangement, with a thin steel bracket holding the needle valve in the same location, also off the aluminum back-plate. This works better, as the steel bracket conducts far less heat to the needle-valve assembly, the

fuel stays cooler, and the engine runs steadily. Engines with the old style back-plate and integral needle valve arm can be modified to use the new style mounting for better running. The OS website lists the parts needed to modify the older engines.

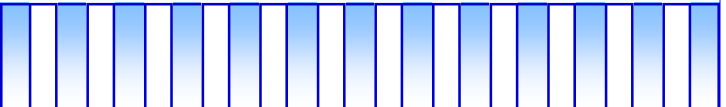
Lorne Hoepker brought in a small electric powered "Stik" type model. It wasn't really for show and tell; he needed advice on hooking up the wiring for the control servos.



PROGRAM: There was no program tonight.

NEXT MEETING: Thursday, May 6 at 7:00 P.M.

THE MEETING ADJOURNED AT 7:55 P.M.



MEMORIAL SERVICE

There will be a 'Memorial Service' held for our late member, **Rod Lippert**, on Saturday May 1st at 11:00 AM at the **Plymouth Congregational United Church Of Christ**, 2401-Atwood Av. on Madison's east side.

WIMPY - WIMPY - WIMPY

Cheap, little skinny, stamped out turnbuckle-wrenches can and do slip off of the turnbuckle-flats very easily and can be very aggravating.

To make their wrenching a lot easier, epoxy or bolt two or three of these wrenches together to give them a little beef. Now you have a miniature wrench that is two or three times thicker... the way they should have been in the first place.

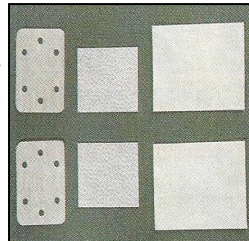
HINGES...MAKING THE RIGHT CHOICE

FOR FREELY MOVING CONTROL SURFACES, YOU HAVE TO USE THE RIGHT HINGE AND INSTALL THEM PROPERLY.

Today, installing CA hinges is common, and thanks to the popularity of ARF models, this type of hinge has almost totally replaced standard pinned hinges. Nearly every hardware package includes these quick and easy to install hinges. When CA hinges were first introduced, they were used mostly on smaller airplanes and weren't recommended for giant-scale birds. But now CA hinges are used for all sizes of airplanes, including some giant aerobatic planes

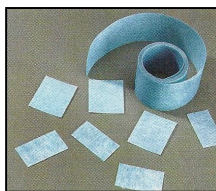
Why now? Some specialized CA hinges have proved to be strong enough to handle the extra flight loads of the bigger planes, the material they are made of is thicker, and we generally use more of them for each control surface. Of the many I have examined and used, I can say that CA hinges aren't all alike. Some are thin and others have slots in the center to help CA glue to flow more easily into the hinge slot. Some even have small holes on either side of the slot to make the hinge flex more easily and let the CA form a stronger bond with the wood.

If you want to use these hinges with giant-scale models powered by gasoline engines, don't use the slotted type. These have less material crossing the hinge line and in time, can fail do to vibration. There's no problem using slotted CA hinges in electric-powered or smaller glow models, but if you buy a large ARF and the thinner, slotted CA hinges are included in the hardware package, play it safe, and replace them with non-slotted hinges. There is nothing wrong with CA hinges if they are properly installed, but beware of giant-scale models with large control surfaces. Use the correct type and size, and then increase the number of hinges you use per control surface.



Heavy-Duty CA Hinges

Some really tough blue CA hinges are sold by Radio South. These hinges have been used for years and are one of the first products Radio South sold. They were developed in the 1970s for pylon racing by Steve Helms, who, back in the day, was the father of Hot Stuff CA. With these hinges, a cloth material is hot-bonded on both sides of the Mylar center. This gives superior CA infusion with no de-bonding of the cloth material from the Mylar. The hinges are well thought of by those who use them and are still widely used by many, even on large models.

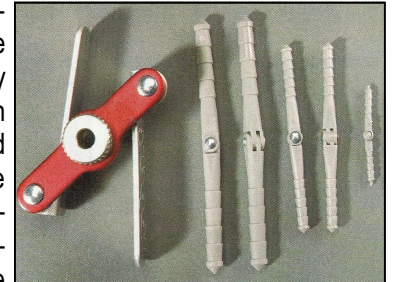


Another good CA hinge for big planes is sold by B&B Specialties. These hinges come in model size ranges of 10 to 20

pounds and 20 to 35 pounds. These, too, are made with superior materials and have the quality and strength needed for giant-scale applications.

Pin Hinges

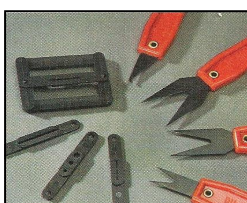
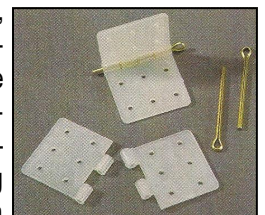
Some larger models now come with hinge pins. HingePoint hinges available from Robart Manufacturing are by far the most popular of these "drill-and-insert" hinges, and they've been on the market for many years. They are available in three sizes; 1/16-, 1/8-, and 3/16-inch diameters. The larger, Super Hinge, is specifically intended for the largest models. HingePoints are easy to install and require a single hole drilled in the leading edge of the control surface and in the matching mating surface for each hinge. To accurately locate and drill these holes, Robart also offers a drill fixture with two bushing sizes (1/8 and 3/16 inch). The fixture positions the drill bit for consistent hole alignment. To help seat the hinge knuckle and allow the pin to align with the hinge line, reinsert the drill bit about 1/4 inch, and elongate the hole opening by moving it from side to side at a slight angle. This produces a slightly tapered entry to allow the hinge knuckle to fit tightly.



HingePoints and other similar hinges can be glued in place with Zap Hinge Glue, epoxy, white glue, Gorilla Glue, silicone sealant, and several other types of adhesives. I don't recommend CA, as it does not adhere well to the plastic. To prevent the glue from binding the hinge pin, put Vaseline or fine machine oil on the pin and knuckle before you install the hinge

Flat Pinned Hinges

For hinging thinner control surfaces, Du-Bro flat hinges are the old standard, and they work very well. They come in three sizes; (mini, standard, and heavy-duty), so you can use them in any size airplane. The larger ones have removable hinge pins (cotter pins), so you can remove a control surface after you've installed it. Also, to make the installing these hinges easier, Du-Bro offers a



hinge slotter kit that includes specialized slotting tools and a wood pick that can be used with all three hinge sizes. The alignment tool centers the forked slotting tool so you can push it into the control surface to form a properly sized

HINGES, CONTINUED ON PAGE-7

ONE MAN'S CHALLENGE...

ARF with a 300-hour 'ready-to-fly-time'



As a rule, not many of us in this hobby would even consider such a task, but when you love flying of any sort and you're also driven by the desire and dream to build and fly an experimental amateur built "Light Sport" aircraft... you have no choice in the matter.

When you grow up around an aircraft influence and your role-models, (besides your father) start with the Wright Brothers... you have no choice in the matter.

When you started to go to the "EAA Fly-In" back in the 60's when it was held in Rockford, IL, which is now held in Oshkosh, WI... and known as the "Airventure"... you have no choice in the matter.

Don Weigt, our humble Club Secretary is this driven man. Recently retired, this will keep him busy for at least 600-hours, I am told. This is a very precise builder and craftsman, to say the very least. His goal is to have it in the air yet this summer and barring any major set-backs, I am sure it will be.

I have a deepest respect for anyone that can take his/her hobby to this level and challenge. Yes, I realize it's not an R/C model aircraft, but Don is one of our longest attending members dating back into the 60's. And he is using the skills he learned and honed by being an R/C enthusiast to make this next step. If you've ever talked to Don about the dynamics of flying, you know that he understands the engineering side of wing lift, stall speed, power loading, and many of the other words that many of

us are *only* familiar in using in conversation.

We'll peak in on Don from time to time over this summer and check his progress and the few problems that will no doubt pop up during the construction process, and how he has solved them.



To be continued...

JOHN/EDITOR

FIELD WORK DAY

BRAD WITT REPORTING

Friday, April 2nd: I arrived at the field about 1:00. One of the sheds had already been cleaned out, six sheets of the plywood enclosure for the shelter house had been taken down, and were being put away for another year.

The early-birds also had the snow-fence around the runway taken down, posts pulled out, and proficiently rolled up for storage.

All the first-stage of the spring-work had been completed in only an hour and a half... thanks to all the following member's hard work!!

John Granberg, Mike and Ana VeDepo, Danny Sutter, Frank Baker, Dick Buescher, Ray Walsh, Dave Rush, Dan Osborn, & (myself).

THANK YOU

JIM LOUDEN

For donating the "chipper"
to the **MARCS Club**

HINGES. MAKING THE RIGHT CHOICE

hinge slot. You use the picker blade to clean out unwanted balsa from the center of the slot. Properly installed and aligned, Du-Bro's flat hinges are extremely strong and provide very free control surface movement.



Using the right tools for the job makes forming hinge slots a lot easier.

Regardless of the size and type of aircraft you fly, there are several choices of hinges to use. CA hinges are quick and easy to install, but have some limitations when used in really big airplanes. Robart HingePoints are great and require drilling holes in the control surfaces to install them. Flat hinges are the old standby and offer freely moving control surfaces. Pay attention when gluing any hinge into place; give the control surface a good tug to make sure the hinges are securely glued. If you aren't sure about the hinges you get with your model, don't be afraid to replace them.

JERRY SMITH / MODEL AIRPLANE NEWS

TIP of the MONTH

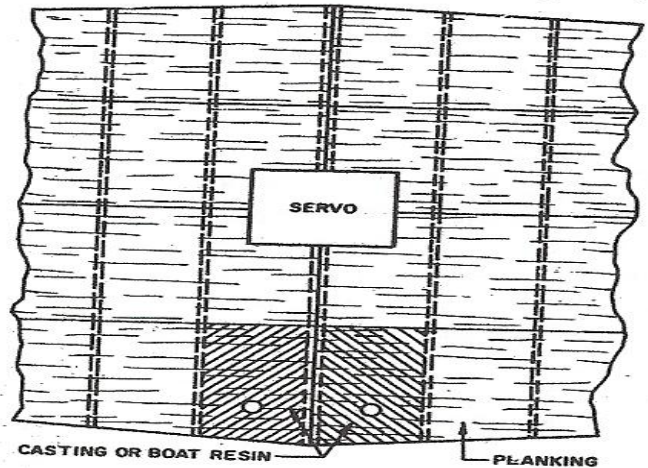
IF YOU HAVE EVER MASKED OFF OVER A FRESHLY PAINTED MODEL TO PAINT THE SECOND COLOR ONLY TO HAVE THE TAPE DESTROY THE FIRST COLOR WHEN YOU REMOVE IT... THERE IS A WAY TO ELIMINATE THIS DILEMMA.

THE SECRET IS TO USE JOHNSON & JOHNSON DERMICEL TAPE. THIS HOLDS TIGHTLY TO ANY CLEAN SURFACE, BUT WILL NOT DAMAGE THE FINISH WHEN IT IS REMOVED.

YOU SHOULD ALWAYS REMOVE ANY TAPE BY PULLING IT BACK OVER ITSELF. NEVER PEEL IT OFF THE SURFACE BY PULLING IT STRAIGHT OUT TOWARDS YOURSELF.

BUILDER'S Work Bench

Here's a quick, strong, and simple way to prepare your wing assemble for accepting the nylon mounting bolts. After the trailing edge planking is installed on the top and bottom of the wing, stand the wing upright on the trailing



edge and secure it in that position. Next, mix-up an adequate amount of casting resin, boat resin, or fiberglass resin and pour the mixture down into the cavities, that is created between by the center ribs, where the bolts will be passing through. When it has cured fully, mark the hole positions and drill through the wing and this solid resin area.

This method will not only greatly strengthen that area of the wing, but it will allow you to cinch down the wing bolts without any fear of crushing the wing structure.

THREADING PLASTIC PARTS ONTO STEEL THREADS

For example; when you need to install the plastic ball-cups on your turnbuckles, slightly rub over the steel threads with Chap-Stick, Carmex, or Bee's-Wax for a semi-dry lubrication. It will make them thread on much easier and hold stronger.

2010 Club Events

Event:	Date:	Location:
<i>War Birds over Kettle Field</i>	June 13	Kettle Field
Ken Kindschi Scale Rally	July 18	Kettle Field
Boy Scout Aviation Day	?	Kettle Field
2010~ Float-Fly	July 10	Lake Waubesa
2010~ Electric Fun-Fly	August 7-8	Kettle Field

All data is tentative at this time and will be updated as it becomes available.

NOTICE:

OUR STORAGE SHEDS WERE BROKEN INTO. REPAIR AND UPDATING THE DOOR CONSTRUCTION HAS TAKEN PLACE. NOTHING WAS STOLEN AND THE DETAILS WILL BE DISCUSSED AT OUR MAY 8TH GENERAL MEETING. NEW KEYS WILL BE AVAILABLE AT THAT MEETING. THE COMBINATION LOCKS ON VARIOUS THINGS REMAIN THE SAME AS THE GATE

FIELD WORK DAY
BRAD WITT REPORTING

Saturday, April 17th was a cold windy day, but a hardy group of members overlooked that and we accomplished a lot. Many thanks go out to **Burr Fontaine** for bringing the "donuts!"

The fencing got repaired, the mowing and trimming was done, and the brush along the parking lot was cut down and chipped. It was nice to have a chipper to use for the day.

We had enough dirt on hand to fill the post-holes from the snow-fencing and some of the low spots around the shelter. We will have the City drop off some more black-dirt before we can continue filling any of the remaining low areas.

Burr Fontaine and I were able to repair some of the safety cages, but because of the cold temperatures that day, the storage sheds weren't able to be painted. That will have to be done on another day.

Thanks for all the hard work the following members put in on that blustery early-spring day!!

Bill Kinney, Dick Sutton, Frank Baker, Dave Rush, Wendell Hottmann, Hubi Schneider, Al Hable, Jim Loudon, Ed Buechner, Ray Walsh, Lindley Wolff, and Burr Fontaine.

Brodhead Flying
Brodhead indoor flying ends April 28
Location..... Brodhead High School Gym
Time..... Wednesday 7:00~10:30 pm
Cost..... Free, please contribute \$10-20 (or more if able)(one time only) for janitor's gift.

RULES:
 6oz weight limit. Electric, CO2, or Rubber powered aircraft. 6.5oz limit for those with protected prop such as the *lightflight.com*, *Bug*, and *IFO*. Weights greater than 6oz will be allowed on a case by case basis for very slow flyers. We fly Micro aircraft only (3oz and less) any time and the larger planes such as 3D (3~6.5 oz) the first 1/2 hour of each hour. Other rules; such as flight-line, which bathroom to use, etc. are available from the regulars. Children less than 12 are welcome, but must be accompanied by an adult and must not leave the High School Gym area.
AMA membership not required.
All are welcome, including guests



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: May 6, 2010

Field maintenance and overview in preparation for this season's events

PLEASE,

Just Let Me Do My Job!

If you're installing an aluminum heat-sink on your electric motor, first, completely remove the label/sticker from the motor so you have metal to metal contact between the two. This will improve the effectiveness of the heat-sink so it can do what it's suppose to do... pull the heat out of the motor.

ROADSIDE CLEAN UP

BY...MARK FINLEY

Once again the intrepid road cleanup crew ventured forth to beautify the county, serendipitously accomplishing the task on "Earth Day 2010." The crew was represented by **Brad Witt, Bob Geimer, Dick Sutton**, and myself, **Mark Finley**. A good time was had by all as we walked in bright sunshine and relatively cool air. The spring pickup usually yields the largest amount of trash, having had the entire winter to accumulate, and sure enough, six very full bags were collected. The crew revels in the tacit yet undying gratitude and adulation of their fellow county residents, but even without overt expression, such a job has adequate rewards in and of itself. See you again in July.

SCHULTZ

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315 South Thompson Road, Sun Prairie, WI.

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*

Help Support our
Madison Area
HOBBY SHOPS
by Buying locally