



# MARCS Sparks

**FEBRUARY 2010**

VOLUME 49 ISSUE 2

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**  
**602 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-5)**

**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**

January 7, 2010

Submitted by: **Don Weigt, Secretary**

**Call To Order and welcome:** At 7:09 P.M. by President **Brad Witt**. It was a snowy night, only nine members were present, and there were no visitors.

**Secretary's Report:** Motion by **John Granberg**, second by **Tony Kremm**, minutes of the November meeting were approved as published in **SPARKS**.

**Treasurer's Report:** Was available for viewing. Treasurer **Dick Sutton** reported membership for 2010 stands at 48.

### **OLD BUSINESS:**

#### **Tom Lazar New Year's Day Memorial Chili**

#### **Feed and Fun Fly:**

**Brad** thanked **Ray Walsh** and **Tony Kremm** who helped him prepare the shelter. The event began about 9 A.M. and lasted until about 1:30 P.M., at which time the last 4 people there loaded the generator to be hauled to its winter storage. The **John Steen's** chili and deserts brought by **Tony Kremm** and **Ray Walsh** were great! There were plenty of heaters brought by several members. The shelter was about 40 degrees at 9:30, but warmed to nearly 80 degrees later. About 15 to 18 people attended, 5 or 6 flew, including 2 others who flew **Dave Rush's** electric "combat" plane. All planes that flew were electrics. Nobody tried to start a glow or gas engine. **Brad** returned **Charlie's** heaters to him on Tuesday, with the club's thanks. We'll wait for warmer weather to take down the plastic and panels on the shelter.

**Brad** asked for gift ideas to thank the landfill people for clearing the entrances and parking lot so well for the event. Their 'End-Loader' did as much in 10



**Newsletter Editor**  
**John Steen steensr@yahoo.com**

*Minutes continued from page-1*

minutes as **Brad** could have done in days of shoveling. Taking them lunch in the form of pizzas, subs, or a cheese and sausage platter were suggested. **Wayne Lanphear** is checking how many people work there.

**January 3rd Indoor Electric flying at Janesville Craig from 5:30 to 9:00 P.M.:** **Don Weigt** estimated that 15 to 20 pilots flew there Sunday. The space is large and very fine, although he still bumped into a few retracted basketball backboards.... Everyone seemed to have a good time. The space is big enough for four basketball courts, although the floor isn't marked that way. Micro models were flown in a one court area, along with some 3D stuff when there were no micros around, larger and faster stuff in the larger space, with some racing. No mid-air's were seen or heard by **Don**, who got there about 6:30. The session was so long that some people left early and others arrived late, and still had plenty of time to fly. Thanks for arranging it, **Dave!**

**Indoor flying at Brodhead Wednesday nights:** **Don Weigt** reported that he hadn't been there for a few weeks, so had no fresh information, but gave the basic information of when and where it is, and that it's a single basketball court size gym.

**Brad** talked to **Ed McDonald**, who is recuperating nicely from some surgeries.

2010 Directories were available for all members. If you don't already have one, get one at the next meeting.

**New lock combination for 2010:** **Wayne Lanphear** told **Brad** that he changed the lock on Wednesday, 01/06/2010. Use the new combination on the back of your 2010 membership card to open the gate now.

**Field contract:** **Wayne** told **Brad** there's not much to report yet on a new contract with the City. A different person is handling it for the City this time.

**Banquet:** No info yet.

**Celebrate Youth:** No word about participation

this year.

### **NEW BUSINESS:**

**2009 Awards:** Nominations are needed for the Tree Chopper, Smoking Hole, Submarine Commander, and Scooter awards. Pass them along to any Board members or officers, with a short description of why they are deserved. We have it on good authority that **Frank Baker** "successfully crashed seven times" in 2009, crashing his B-17 two times in only three flights. In one of the two, the B-17 got stuck in a tree so securely the tree had to be cut down... The B-17 is fixed and ready to fly again.

**Rod Lippert radios:** **Brad** had a box from **Rod** containing many servos, some receivers, and a few other items, free to anyone who could use them. They all were gone at the end of the meeting.

**St Ann's School gymnasium, Stoughton:** Thursday, March 11, 6:30 to 7:30 P.M., model aviation demo, Cub Scout Pack 162. **Clayton Greaves** has organized this, and contacted the electric flyers about bringing planes to fly or show. It's a small school gym, so models need to be 6.5 ounces or smaller. Contact **Clayton** if you'd like to participate. He also needs about 40 old model airplane magazines for handouts, since the pack has 35 boys ages 6 to 10, so please bring any you have to the February meeting, or to the March meeting if you forget in February. <rcgreaves@gmail.com>

**February train show:** **Brad** got a reply from them saying we're not invited, that they are trains only.

**Spring Green modeler's stuff:** We will invite the Spring Green modeler who is selling out his stuff to bring it to the March swap meet.

### **Nearby events:**

\* Wednesday, January 27, 7 to 9 P.M.: WarBirds meeting at Verona Public Library, 500 Silent Street, Study Room 3, with a "debrief" afterward at Culvers. It's free: no dues to be in the group, AMA not required. They talk for an hour or two about WarBirds and modeling them.

\* Sunday, January 31, Iowa City, IA, Swap meet in the main hangar, Iowa City Airport, Riverside Drive, Opens 8 A.M., auction at noon, 319-358-8519, rve-depo@cityelectricsupply.net.

*Minutes continued from page-2*

\* Sunday, March 7, Appleton, WI, R/C Show and Auction, 9 A.M. to 1 P.M., The Wave Bar and Ballroom, 2350 N. Casaloma Dr. 920-734-2407, Tim Stadler 920-757-9238 timflight1@aol.com.

\* Thursday, March 11, 6:30 to 7:30 P.M., model aviation demo, Cub Scout Pack 162, St Ann's School gymnasium, Stoughton: Clayton Greaves rcgreaves@gmail.com.

#### **RAFFLE:**

Only one prize, due to low ticket sales. **Brad Witt** won the Magnum .46 2-stroke engine.

#### **SHOW AND TELL:**

**Jeff Brimmer** showed a nice 53.7 inch span 46.2 inch length CMP Spitfire ARF with mechanical retracts and Magnum .46 two stroke power. Cost with the retracts was only \$136 plus shipping. Radio is a six channel, engine is inverted, with an onboard glow driver and Hangar 9 remote glow starter. About a half pound of lead was needed just behind the spinner to balance, but that was less than the 250 grams (8.8 ounces) predicted in the instructions. Weight is about 6.8 pounds. The retract linkage took about four hours to set up, and still needs a little bit of adjusting before the model will be ready to fly. **Jeff** hopes it flies as good as it looks!

**Jeff** also showed and demonstrated an Air Hog helicopter he bought for \$20, from Menards(?) It flew well, for about 10 minutes, although range was limited and it only went straight or turned right. Amazing, for the price!

**Program:** No program tonight. People thought it more prudent to get back home in the inclement weather than to stay later for a video.

**Next meeting:** February 4, 2010, at 7 P.M.

**February agenda:** 2009 Float-Fly Video(1/2 hour)

**Adjournment:** 8:02 P.M.

## **HELP WANTED...**

### **Event Assistance Needed**

Former **MARCS** Club member, **Clayton Greaves**, is seeking assistance of six club members in the capacity of electric demo-flights and instructors to participate with him in an event that he has held over these past years. The purpose of this event is to introduce and hopefully create an interest in aeronautics and modeling... in the youth of our surrounding communities.

This will be an "**Aviation Demo**" for Cub Scout pack #162 which has 35 members, ages 6-10 years old. The agenda will consist of a mass glider launch, discussion on the basics of aeronautics, and some RC flight demos.

(Note: This is a smaller elementary school sized gym, so 6oz fliers are recommended for these demo-flights)

We are also seeking some old issues of RC magazines to be able to pass out to the boys.

It would also be appropriate to have some larger electric and/or glow planes there for display purposes. There's nothing that opens a young boy's eyes wider than a 40, 60, or 90 size RC airplane that they can see up-close and perhaps even *touch*.

**This event is scheduled for;**

**Thursday, March-11<sup>th</sup>, 2010**

**6:30pm~7:30pm,**

**St. Ann's Catholic School Gymnasium  
324-North Harrison St. Stoughton, WI. 53589**

Key this address into mapquest.com or googlemaps.com for easy location

**RSVP if you would like to participate.**

**<rcgreaves@gmail.com>**

**MARCH 4TH IS COMING UP SOON SO IT'S TIME TO START  
LOOKING AROUND YOUR SHOP OR GARAGE FOR THOSE ITEMS  
YOU MIGHT WANT TO DISPLAY FOR SALE AT OUR ANNUAL**

**Swap meet**

## New Years Day, 2010: Tom Lazar Memorial

# Hot Chili & Fun Fly

It was frigid as most New Years Day's mornings are at 9:00am when **Brad Witt, Dave Rush,** and I arrived at our **Kettle Field** to set-up for the day's event. When the snow squeaks when you walk on it, it's cold. Within 30 minutes everything was pretty much all set up with the drone of our gas generator humming in the background. The crew from the land-fill had done an excellent job of opening up both of our driveways and clearing our entire parking lot.

The temperatures were not unbearable when it came to the optimistic attitude of some of the club's hard-core flyers. There was not a glow-engine to be found anywhere though... only the whining of electric motors as they took to the air. Their "Batteries" were quick to die-off in the cold air and it was found out early that warming them near the heater, in the shelter house, before going out apparently was the secret to any sustained flight. Although, as the mid-day came, temps moderated somewhat which promoted longer flights and more planes in the air.



The majority of the members spent most of their time inside the shelter-house where the warmth of the propane heaters lulled them into conversation while enjoying a few bowls of the hot Chili and/or sipping on a warm drink. Several of the members that have been attending this event over the years have taken it upon themselves to bring a dessert of some sort, which provided a wide assortment of scrumptious goodies... with most of them too sinfully good to mention here.



**Dave Rush** and **Wendell Hottmann** were the main flyers of the day, bringing a wide array of aircraft to fly. Some sported miniature skis, while others just flew with their conventional wheels. I did see one sea-plane that worked just fine in the snow. Other than an occasional nose-over on the landings, crashes or tree-top parking just didn't happen on this day.

**Fred Schrank** and **Lindley Wolff** joined in on the flying fun when Dave brought out his fleet of Combat-Ready "Flitters" and handed them a transmitter. There were no attached ribbons this day though... just a sky full of screaming "Flitters" bringing lots of enjoyment to the group!



There was an ample supply of Chili, hot and cold drinks, and other goodies available to take ones thoughts off the cold January weather for a while as they spoke of the progress of projects going on in their home work shops. So food-wise we were pretty well dialed in on and the heaters that we used this year were very capable of providing a comfort-zone even with people going in and out throughout the event. The gas-generator once again worked flawless and was lovingly put into winter storage to await our next Flying Event during warmer temps.



The **MARCS** Club offers their **"THANKS"** to everyone that helped out and participated in making this a memorable Club Event to kick off yet another season of flying events at our **Kettle Field**. This event always promotes the hope for an early "Spring" in many of us.

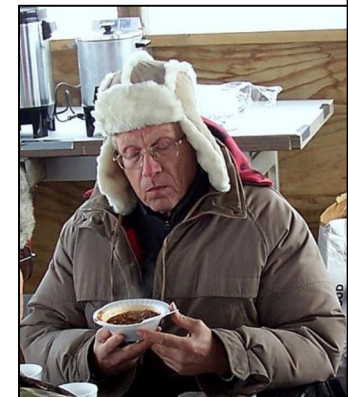


The following is a sign-in clip-board list of the members and guests that were able to attend this year's event:

Dave Rush, Tony and Dorothy Kremm, Brad Witt, Dick Sutton, Ray Walsh, Wendell Hottmann, Otto Oie, John Granberg, Danny Sutter, Charlie Schultz, Bob Geimer, Fred Schrank, Dick Buescher, Lindley Wolff, Joey Jobe, and John Steen.

Last but not least; Thanks to our Club Photographer, **Otto Oie**, for braving the elements and providing the great photo-shoot of this event.

*John/Editor*



# M.A.R.C.S.

Madison Area Radio Control Society

## Annual Membership Dues

<b>Regular membership</b> .....	\$60.00
<b>Junior membership</b> .....	\$25.00
<b>Park Pilot membership</b> .....	\$25.00
<b>Family membership</b> .....	\$20.00
<b>Associate membership</b> .....	\$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*

## CHOOSING the RIGHT GLOW PLUG

Several factors influence the use of the correct glow plug for your engine. Here are some guidelines:

### ENGINE TYPE

**Standard engines** (engines with a 1-piece head) are most common. Standard plugs are easily available, inexpensive, and fit almost all standard engines. Standard plugs are installed with a washer, which creates a compression seal with the head.

**Turbo.** Many new O.S. engines, which feature a special 2-piece turbo head. The biggest benefit of turbo plugs is superior performance. Unlike standard plugs, turbo plugs (identified by a "P" in their description) feature a taper "seat" that matches perfectly with the head. That creates a superior compression seal and with it, maximum efficiency and power. Turbo plugs are the choice for racers, who want, and need, top performance.

**A word of caution:** You should never install a turbo plug in a standard engine or vice versa. Doing so risks doing serious (and expensive) damage.

### DISPLACEMENT

Small displacement engines need a hotter plug than larger displacement because larger engines have more mass and retain heat better.

### NITRO CONTENT

Use of higher nitro fuels will require a colder plug than lower nitro fuels.

### TEMPERATURE

The hotter the day, the colder the plugs need to be.

### ADDITIONAL THINGS to KNOW

- Hotter plugs promote better idling and acceleration. If your engine runs rough or accelerates sluggishly, a hotter plug will help.
- Cold plugs produce more power and may improve performance if your engine runs hot. The downside is rougher idling and more difficulty in tuning.
- Fuel-air mix not only affects how your engine performs; it can also have an impact on how long your plug lasts. If you run rich, it means

that you're using more fuel than necessary for top performance. Modelers are often advised to run rich during engine break-in, because it helps cool the engine. However, running too rich can also cause an engine to bog down or quit entirely. In addition, it also means that the glow element is being exposed to more contaminants than necessary, which shortens plug life. Running lean means that you're using less fuel. "Leaning in" an engine has a positive effect on performance. However, care is needed here, because over-leaning an engine can harm it, by raising operating temperatures, and burn up a plug. [Tech editor's note: More than the plug might be lost, excessive leaning can ruin an engine before its time! Do not over lean!]

### FINAL THOUGHTS

Choosing the right glow plug not only improves performance, but can also extend the life of your engine and the glow plug itself. With the guidelines above and the tips below, you're well on your way to achieving both.

- Buy quality plugs. You're protecting your investment.
- Store plugs where it's dry. Moisture can ruin them.
- Use the right glow plug. Follow the guidelines above.
- Follow the proper break-in procedures.
- Tune your engine carefully. Running too lean will make your engine "blow" plugs more often. Proper tuning helps extend plug life.
- Never touch the filament of a glow plug. Doing so can break the filament and ruin the plug.
- Don't over tighten your plug. Tighten it until it's just snug.
- Be sure to shim your plug correctly. A plug that's too close to the piston can cause pre-detonation, which will quickly damage a glow plug and could also damage the piston.
- Use only a glow starter or a 1.5V battery to heat your plug. Otherwise, your plug may burn out ahead of its time. Don't be afraid to ask for help. Experienced modelers have already "been there, done that." Their experience can save you time and money; and most are glad to help.

*Continued on page 7...*

**Choosing the right Glow Plug...**

- Glow plugs get very hot, enough to glow the filament red or white hot, and removing a glow plug as soon as the engine is stopped can cause burning if appropriate care isn't taken. Special caution should also be taken while near the fuel source.
- Some connectors for glow plugs can short circuit and damage batteries, or cause them to explode. Batteries may get hot during their use on the glow plug. This especially applies to homemade or nonstandard connectors.

**EDITORS NOTE:**

One source of material that can ruin glow plugs is tiny pieces of debris left in the engine during/after manufacture. Before you run any new engine, it's a good idea to flush, at least the cylinder and combustion chamber to eliminate as much "stuff" as you can. Flush it with fuel or methyl alcohol, never water. The best way to flush is to remove the head and the back engine plate and flood the engine with the flushing fluid. If you're not comfortable in removing the engine parts, then take the glow plug out, move the piston down so that the top of the piston is below the exhaust port and pour the flushing liquid down the plug hole and out the exhaust port. If you catch the flushing fluid on a white paper towel, you should be able to see anything that the flush eliminated.

*Information is from the tech-team of O.S.Engine Manufacturing Co.*

# PROPELLER HANG

*It's not why to do it...*

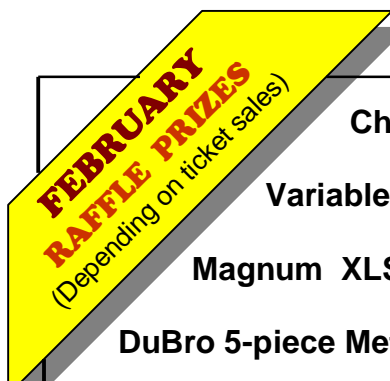
**Its HOW to do it !**

This is probably one of the more difficult maneuvers to master, but once you get the *hang* of it and get it right, it's probably one of the most spectacular. The object is to fly along slowly then pull to a vertical position, allow the speed to bleed off giving it throttle to keep the model in a stationary vertical position.

Keeping the model in a vertical state while hovering still requires a lot of work with the throttle, rudder, elevator, and a little aileron, the torque from the motor tends to make the model start torque-rolling.

Practice this at a safe altitude and once you can hold your aircraft in a stable propeller hang as well as be able to fly out of the maneuver without losing any height, you can slowly start practicing at a lower and lower altitude. This maneuver does requires enough power to be able to climb vertically out.

**AMA INSIDER**



Choice of Calendars

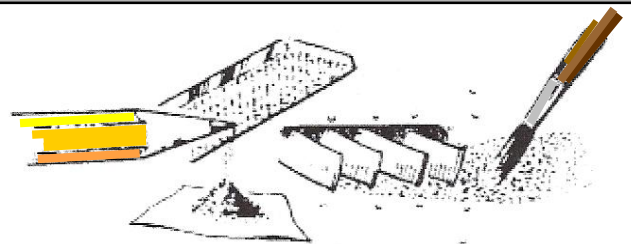
Variable-speed Dremel tool

Magnum XLS - 46 glow engine

DuBro 5-piece Metric Ball-Driver set

**NO MARCH RAFFLE  
DUE TO SCHEDULED  
SWAP MEET**

# TIP of the MONTH



## PAINT DETAIL FOR SCALE MODELS

Start by making a small pile of fine pencil dust with a fingernail-file board. Smudge this onto your model with your finger tip or small brush to the aft of the exhaust ports for a realistic look. It can be locked into place with a light coat of matt finish clear coat when you're done.

# 2010 Club Events

Event:	Date:	Location:
MARCS Annual <b>Swap-Meet</b>	March 4	Madison Labor Temple
MARCS Annual <b>Banquet</b>	April ?	Maple Leaf, McFarland
<b>War Birds</b> over Kettle Field	June 13	Kettle Field
Ken Kindschi <b>Scale Rally</b>	July 18	Kettle Field
<b>Boy Scout</b> Aviation Day	?	Kettle Field
2010~ <b>Float-Fly</b>	July 10	Lake Waubesa
2010~ <b>Electric Fun-Fly</b>	August 7-8	Kettle Field

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

## INDOOR ELECTRIC FLYING

### Brodhead Flying:

**Brodhead indoor flying dates for 2010**

Every Wednesday **except...** 3/31 (Spring break)  
Any day cancelled or with early release for snow will also cancel indoor flying.

**Location.....** Brodhead High School Gym

**Time.....** Every Wednesday pm 7:00~10:30

**Cost.....** Free, please contribute \$10-20 (or more if able) 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](http://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**

## Indoor Electric Flying

**CHRISTIAN LIFE HIGH SCHOOL (North gym)**

5950 Spring Creek Road, Rockford  
Corner Spring Creek Road & Mulford Road

**Airplanes will be limited to a 8oz. Flying weight**

**Slow flyers and Micros encouraged**

**Electric Helicopters welcome**

**\$10.00 flying fee / Spectators FREE**

Saturday 2/13....7:00pm~10:00pm

Saturday 2/27....7:00pm~10:00pm

Saturday 3/6.....7:00pm~10:00pm

**AMA membership required**

For more information  
contact Jim Hayes (815) 721-5146

## 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: February 4, 2010**

**Trees & chipping / 2010 flying events**

**Fill in the low spot east of the shelter**

**Motion relating to club event videos  
and moneys involved**

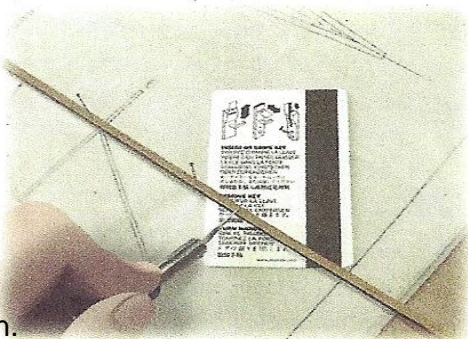
**Issues from membership**

## BUILDER'S Work-Bench

### MINI-CUTTING BOARD

When building stick models, you need to be careful not to cut through your clear protector sheet when sizing some of the balsa strips. Doing so will allow glue to seep through and soak into the plans. This is not a good thing, as you well know. To avoid this from happening, use your knife to score the cut first and then slip an old credit-card under the part you need to cut and do so without the fear of slicing into the plans or its covering. Remove the card and glue it into place knowing you are safe to do so.

Now you've got a use for those pesky sample cards that come in the mail for preapproved credit or some kind of insurance plan.



# SCHULTZ

## SPORT & HOBBY

**(608) 837-3498**

**R/C...Airplanes~Gliders~Helicopters**

**Builder kits, ARF kits, RTF kits**

**Electric / Gas / Nitro-Fuel**

**Hours: 8:00~5:00 Monday~Friday**

### SATURDAY, JANUARY 16th FIELD WORK DETAIL:

The 10:00am work crew had most of the work done by the time I arrived at 9:55. Taking the clear plastic down off the shelter and rolling it for storage was the main job for this today. I did get the locks on the sheds thawed out with my trusty mini-torch and we were out of there by 10:00.

The following members gave their time to get the chore done:

**Dave Rush      Wendell Hottmann  
John Granberg      Brad Witt  
GOOD JOB & THANKS GUYS**

*Brad Witt reporting*

### DAWN~PATROL BREAKFAST

**Thursday, Feb. 18th  
8:30 am**

### PRIME TABLE RESTAURANT

**4102 Monona Drive  
(At: Buckeye Road)  
Monona, WI.**