



March Newsletter

Volume 08, Issue 3

March 1, 2008



WOSV

*St. Cloud Amateur Radio Club
Celebrating 90 years on the airwaves*

Dates to Remember:

March:

March General Mtg 20th

April Board Mtg 10th

April General Mtg 17th

May General Mtg 15th
w/Auction

June General Mtg 19th
Field Day 28th &
29th

July Board Mtg 10th
July General Mtg 17th

August Picnic 9th

August General 21st

Sept General Mtg 18th

Oct Board Mtg 9th

Oct General Mtg 16th

Jamboree on the 19th
Air (JOTA)

Nov Annual Mtg 21st
w/Auction

Dec General Mtg 18th

Message from the President — The Prez Sez ...

Thank you all for the great work at the hamfest. We had some problems and disorganization, but everything worked out in the end. About 340 paid to get in, 50 tables were rented

and just short of 2000 dollars raised. We did well.

We do need more planning and organization to smooth out the rough spots.

After the `fest and at the last general meeting we came up with ideas to solve the problems that popped up. The board will pound out the details. Next year should be even better.

Upcoming Area Hamfests:

Buffalo— March 29th, 8:00 AM to 1:30 PM

See www.k0l1tc.org for more info

Brainerd— July 12th, 9 AM to 1 PM

See www.brainerdham.org for more info

Now it's time to visit other hamfests and be there guests. Maybe I'll see you in Buffalo. 73

Scott - n0uv

Your 2008 member dues in the amount of \$20 may be paid to Jerry, KC0WCF, club treasurer!



Email Dave at W0DZW@charter.net with your Call sign, First name and E-mail address to be added to the compiled list of Club Member's Email addresses. These will be shared with club members only.

Join the Club's Email Reflector to stay in touch with club activities and see what projects other club members are doing!

Announcements:

- Join the Clubs' New Email Reflector

See Page 2

- Solar Power Shack

See Page 3

February General Meeting Minutes

Meeting was called to order on February 21st at 7:00 p.m. After the Pledge of Allegiance, introductions were made.

The January meeting minutes were accepted as printed in the February newsletter.

The Treasurer's report was as follows:

Checking	5,447.24
Savings	1,322.02
Rest. Savings	612.43
CD	<u>1,000.00</u>
Total Balance of	\$8,381.69

Treasurer's Report was accepted.

From the Hamfest a total of \$55.25 was sent to the Handi-hams from the coffee donations.

A special thanks to Art, WAoNJR for donating the cost of the Armory rent (\$150) for the Hamfest!

\$55.25 sent to Handi-hams from Coffee donations!

The Hamfest on February 16th was a success! There were 320 ticket stubs in the drawing barrel, with an estimate of 340 paid visitors and 50 tables were sold to vendors. The gross from the Hamfest event was 2,556.00, subtracting expenses, results in \$1,999.09 in profit. This is up from last year and

equivalent to two years ago.

There was lengthy discussion on things that didn't go so well at the hamfest and suggestions were made and discussed as to how the event may be improved for next year.

Some ideas were to be sure to have plenty of tables for vendors available, this year the armory didn't have some of the tables that they did last year

and it was a surprise the morning of the event to have fewer tables available than planned. A suggestion was made to not allow vendors in until all tables were setup, also nto allow vendors in

the door without first paying for their tables. Many aged that having the talk-in station near the back door and have that act as the collection point for vendor payment, perhaps the talk-in location and would also be a central point that vendors may come to with questions throughout the event.

Some comments from vendors indicated that they didn't know who to go to with questions and discussion indicated that the club should look into name tags, hats

or vests to draw attention to SCARC club members. It was discussed to issue wrist bands upon paid entry to better track those who have or have not paid. More tables available for near the food line would perhaps increase sales providing a location to sit down while eating. Also perhaps

a change in menu is in order for next year instead of chili. Another suggestion was to move the ticket drawing barrel to the announcing table to relieve congestion at the front door, These and many more ideas were discussed, the board will have further discussion at the April board meeting.

Important upcoming March and April dates were mentioned.

There was no World Radio drawing as they are not currently available and the \$5 prize would have gone to Devan Burnett, KCOKBH if he had been present.

Meeting was adjourned at 8:10.

Respectfully submitted by Mike Parker, KCOUEA.

Several improvements for next year's Hamfest were discussed.

Stay in Touch! Join the club's e-mail reflector:

1. From your email account that you would like to send and receive Radio club emails at, send an email to: scarcmn-subscribe@yahoogroups.com In the body of the email include your name and ham call sign.
2. Then check your email for a new email, almost immediately there will be an email which will tell you to reply to that email to confirm your request to join, reply to the email. This will alert Brad and Mike of your request to join.
3. Once Brad or Mike checks their email next they will see your request to join and will submit their approval for you to join.
4. You will receive a confirmation email indicating that you were approved and that you have joined the Yahoo Group/the Clubs' E-mail Reflector. You will then receive messages sent to the email reflector by other members. To send a message to all members on the email reflector send your message in an email to: scarcmn@yahoogroups.com

K4RY Moves Station to Solar Power

By John Hung, KI4NHX; Richard Jaeger, K4IQJ and Carey Huff, AI4TZ k4iqj@mindspring.com February 9, 2008

The Auburn University ARC station gets its power from the sky.

Ham radio operators have long known how to run their rigs "off the grid." Operating on alternative power sources such as generators, batteries and solar power is a useful skill, whether for fun or when Amateur Radio is pressed into emergency service. *QST* readers will remember Kim Owen's, K07U, June 2006 report of running a Field Day CW station from a hydrogen fuel cell and Randy Koehn's, KC5TIL, Oct 2006 article describing a solar powered weather station.

The Auburn University Amateur Radio Club, KR4Y, made its mark in radio history July 2007 when it took occupancy of the university's Solar House and likely became the world's first amateur station that operates its entire facility on solar energy: radios, lights, air conditioning, and yes, even a complete kitchen and laundry machine.

The Solar House

The Solar House was designed and constructed through collaborative efforts of the students and faculty in electrical engineering, mechanical engineering, biosystems engineering and architecture departments. The house was entered in the 2002 Solar Decathlon competition held on the Mall in Washington, DC. Ten different competitive events were scored and the Auburn University entry placed third overall, just 0.7 percentage points behind second place University of Virginia (University of Colorado was the overall winner, less than 2.5 percentage points ahead of Virginia).

Auburn University's (AU) team took first place for technical design and was one of five to earn a perfect score on the "Energy Balance" component, which covered three areas:

1. Using solar energy for typical daily activities including:
 - Cooking meals
 - Using common appliances like a refrigerator or dishwasher
 - Operating a TV and video player
 - Using computer stations
2. Meeting or exceeding energy demands
3. Recharging the house battery system



The bottom line is that it is feasible to live off the sun, with energy to spare. The AU Solar House also has the capability to recharge an electric golf cart for local trips.

Thirty-six solar panels on the roof can produce over 5.75 kW under full sun (also called "standard test condition"). Five charge controllers ensure that the panels operate at their peak power point, charging 32 sealed batteries located under the deck below the carport roof. Batteries are connected in series and parallel combinations to yield a nominal 48 V, 800 ampere-hour storage

(Continued on next page)

Current Board Members

President

Scott Hall - NOUV

Vice President

Art Carlson - WA0NJR - Elected

Treasurer

Jerome Dahlager - KCOWCF - Elected

Secretary

David Nick - KD7III - Elected

Mike Parker - KCOUEA - Acting Secretary

Trustees

Leonard Hopkins - KCONZF (2008 - 10)

Harold Hoffman KCOFAX (2007 - 09)

Larry Snodgrass - KCOSMM (2006 - 08)

Past President

Jack Maus - WOMBD

Webmaster

Phil Jorgensen - NIARM



Pictured from left to right:

Art Carlson - WA0NJR (Vice President),

Scott Hall - NOUV (President)

Jerome Dahlager - KCOWCF (Treasurer)

K4RY Moves Station to Solar Power Continued

system. Two inverters supply 120 and 240 V ac loads in the same manner as would be done in a conventional house. In addition, two 4-by-8 foot flat plate collectors are used to heat water for the home. A standard, commercially available heat pump system maintains a comfortable indoor temperature even in the 100-plus Alabama summer heat. The house has all the comforts of a nice bachelor's pad, including full size refrigerator, dishwasher, combination washer/dryer, microwave oven, electric range, telephone and DSL service for Internet connectivity.



The house has several energy conserving architectural features. Special prism-filled skylights spread sunlight for natural lighting. Structural insulated panels are used to form the floor, walls, ceiling and roof. These panels yield an R-34 insulation rating for the walls, ceiling and roof; the floor has an R-28 insulation rating. Large water-filled plastic columns placed across the front glass windows are a decorative attraction, but also contribute to stability of the inside temperature by the sheer mass of water.

A Brief History of K4RY

Auburn University's Amateur Radio history extends all the way back to 1912. Back then, the university was known as Alabama Polytechnic Institute, or API. Miller Reese Hutchinson, an API electrical engineering graduate and assistant to Thomas A. Edison, gave a 2.5 kW spark gap transmitter and crystal receiver to the school. Hutchinson was on hand for the club's inaugural transmission in 1913 (under license 5XA) between Auburn, Alabama and Edison's New Jersey lab. Voice radio came to the club in 1920.

In early summer of 2007, Professors John Hung, KI4NHX, Richard "Dick" Jaeger, K4IQJ and other faculty discussed the feasibility of moving the club to new facilities. John had been using the Solar House the previous year for research and was familiar with its capabilities. Dick approached the Dean of the College of Engineering with a plan to move the university's radio club into the house. With the dean's enthusiastic support, the club moved the Kenwood and Heathkit radios and support equipment from their old clubhouse (a dark 100 square foot closet) into the Solar House over a couple of weekends. Club president Carey Huff, AI4TZ, and other members surveyed the outside area and installed a Hustler vertical antenna and ground radials. The next project is to raise a triband beam antenna on the back porch.

In addition to the Solar House radios, the club operates a repeater elsewhere on campus at 147.240 MHz + (pl 156.7 Hz). When you are in Auburn, come visit K4RY at the Solar House, located on the southern edge of the campus.

John Hung, KI4NHX, and Richard Jaeger, K4IQJ, are both Electrical and Computer Engineering professors at Auburn University. Despite a lifelong love of radio, John only recently became a ham and is still plugging away at learning Morse code. His research interests include renewable energy systems. An avid outdoorsman, John dreams of camping with an Elecraft K2 radio.

*Richard was licensed at age 14 and holds an Extra class license. He is an active DXer at the top of the Mixed Honor Roll and has completed 5BWAZ. He is the author of several electronics textbooks, including the popular **Microelectronic Circuit Design** (McGraw-Hill) and **Introduction to Microelectronic Fabrication** (Prentice-Hall), studied by many university students around the world.*

Carey Huff, AI4TZ, has a degree in Building Science from Auburn University. He holds an Extra class license and is active in APRS, VHF and UHF FM and has recently done some HF contesting in RTTY and phone.

Article from ARRL website: <http://www.arrl.org/news/features/2008/02/09/1/>

Volunteer Opportunities:

Annandale Triathlon

Information Coming Soon — Stayed tuned!

Tour of Saints

July 13th

Bike ride event (not a race) - Volunteers to provide radio communication for bike repairs, injuries and to support operations of the event.

St. Cloud Amateur Radio Club

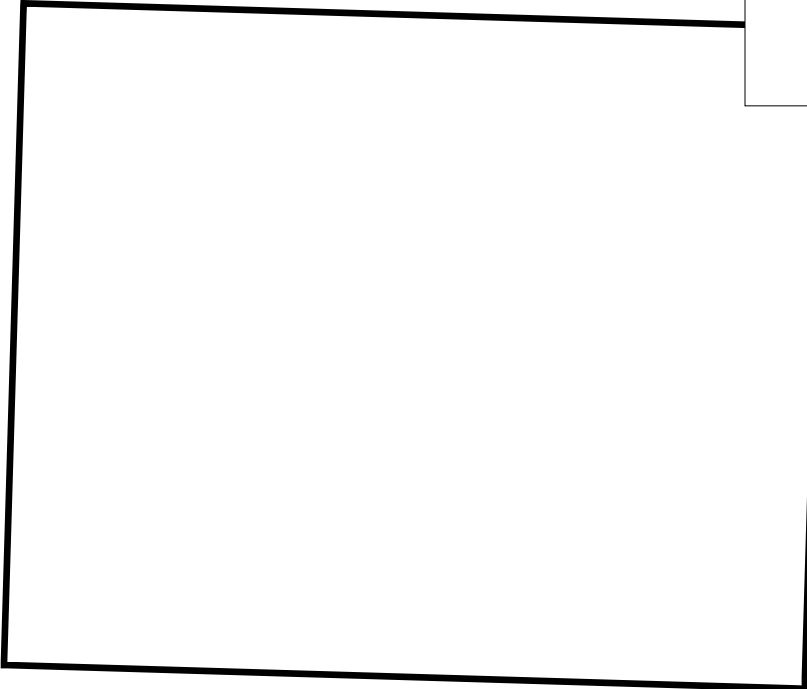
401 4th Street North
Waite Park, MN 56387



Phone: 320-255-1410

E-mail: webinfo@w0sv.org

E-mail Reflector:
[http://groups.yahoo.com/
group/scarcmn/](http://groups.yahoo.com/group/scarcmn/)



Information About the St. Cloud Amateur Radio Club & Area Repeaters

The St. Cloud Amateur Radio Club is 85 years strong!

It all started back in 1921 with Robert "Bob" Witchen, WØSV, licensed as 9SV.

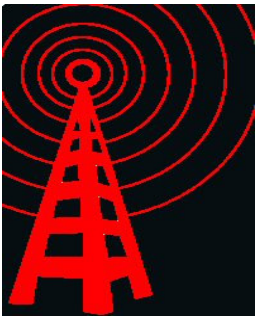
The St. Cloud Radio Club call is registered as WØSV in honor of Bob Witchen, first licensed ham in the area.

Since then, the club has grown by leaps and bounds serving in many useful ways among the surrounding tri-county area.

For a more detailed history visit our website at: www.w0sv.org

73

<u>Repeater</u>	<u>Offset</u>	<u>Tone</u>	<u>Location</u>
147.015	+	PL 100.0	Collegetown, MN
146.940	-	Autopatch	St. Cloud, MN
146.835	-	PL 85.4	St. Cloud, MN
147.105	+	PL 85.4	Avon, MN
224.800	-	No Tone	St. Joseph, MN
444.350	+	No Tone	St. Cloud, MN
443.650	+	PL 85.4	Avon, MN
145.270	-	No Tone	Paynesville, MN
146.520		Simplex	Nationwide Simplex
146.640		Simplex	Nationwide Simplex
442.225	+	No Tone	St. Cloud, MN
147.225	+	No Tone	Sauk Centre, MN



Please email the editor, Mike, KCOUEA at KCOUEA@yahoo.com with any corrections or additions to the newsletter.

