

# Big Rapids Area Amateur Radio Club

December 2009

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## President's Note

It's unbelievable that the holidays are upon us so quickly. This year is flying by with all of the fun we've been having. I hope you can carve out some time to join us for our Holiday Social

on December 3, 2009 at regular meeting location. Attendance at Club events is up and I am receiving many positive comments. Our annual Celebrity Server fundraiser was great. We had more Hams than customers, I think. (hi-hi)

Jim, K4UIH and the staff at Crankers in Big Rapids really did a nice job on the Celebrity Server. The donations amounted to \$165, plus we had a great time. This amount is down a little from past years but is understandable due to economic times and the new location. Thank you, Crankers! I'm sure we will be back next year.

The Festival of Lights Parade is approaching as I prepare this note. Hopefully, there will be many pictures of this event for our future

newsletters. Please thank Don, WA4FRJ; Patricia, KD8GGD and Val, KD8IAM for all of their hard work on this new event.

The Holiday Social will take place on December 3, 2009 at our normal meeting location and time. I hope you will join us and bring a friend or spouse to enjoy the festivities. The presentation will be about personal preparedness by new "ham in a day" member Tricia, KD8KPU. We hope she will renew her membership and become a regular member along with all of our "ham in a day" members. Bring your favorite holiday treat to share and non-perishable food items to donate to the club food drive. If possible, a donation of a white elephant gift for the ever popular auction will be appreciated. White elephants need to be wrapped as to hide their identity and donor from casual observation. All proceeds are used to fund club activities and prizes for future events.

Additional white elephant gift etiquette: gifts may be funny, useful, valuable, cheap, related to amateur radio or not. The gift must be wrapped or boxed. It is the holiday season so wrapping paper can be festive. The donor's identity need not be revealed and actually you are discouraged from doing so.



**Announcements:**

Next club breakfast, Saturday, November 28, 2009, 9:00am at Sharon's in Rogers Heights. Talk-in on 146.74.

Next BRAARC club meeting, Thursday, December 3, 2009, at 7pm at Big Rapids Public Safety Building, 435 N. Michigan Ave, Big Rapids. Presentation Topic: Preparedness Holiday Social: bring your favorite dish to pass, item for a white elephant auction, and non-parishable food item for the food drive.

Next Emergency Committee meeting: December 11, 2009 at 7:00PM at Central Dispatch. Food Drive -- We need your help to support our local food bank. Can goods will be accepted at the December club meeting.

70cm / 440 Net - Every Sunday evening at 7:30 PM

2 Meter - Every Tuesday evening at 9:00 PM

ARES/RACES - Every second and fourth Wednesday at 9:00 PM (2 Meter repeater)

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We had a great time at breakfast last month with a great group of 18 people coming together.

Sharon's Restaurant (our permanent breakfast location) has a very good breakfast buffet with a great selection of goodies.

SHARON'S RESTAURANT  
ROGERS HEIGHTS

JOIN US ON SATURDAY  
NOVEMBER 28  
9AM



KB6NU: Give Your Generator Some Space ,  
By Dan Romanchik, KB6NU

The National Institute of Standards and Technology (NIST), the same folks that bring you WWV, publish a monthly newsletter called NIST Tech Beat. Here's an item from the 10/6/09 issue of NIST Tech Beat that will be of interest to radio amateurs: To subdue the steaming heat of hurricanes or to thaw out during a blizzard, gasoline-powered, portable generators are a lifeline during weather emergencies when homes are cut off without electricity. But these generators emit poisonous carbon monoxide—a single generator can produce a hundred times more of the colorless, odorless gas than a modern car's exhaust. New research from the National Institute of Standards and Technology (NIST) shows that to prevent potentially dangerous levels of carbon monoxide, users may need to keep generators farther from the house than previously believed—perhaps as much as 25 feet. Up to half of the incidents of non-fatal carbon monoxide (CO) poisoning reported in the 2004 and 2005 hurricane seasons involved generators run within 7 feet of the home, according to the U.S. Centers for Disease Control and Prevention (CDC). Carbon monoxide can enter a house through a number of airflow paths, such as a door or window left open to accommodate the extension cord that brings power from the generator into the house. While some guidance recommends 10 feet from open windows as a safe operating distance, NIST researcher Steven Emmerich says the “safe” operating distance depends on the house, the weather conditions and the unit. A generator's carbon monoxide output is usually higher than an automobile's, he says, because most generators do not have the sophisticated emission controls that cars do. “People need to be aware that generators are potentially deadly and they need to educate themselves on proper use,” Emmerich says. With funding from CDC, NIST researchers are

gathering reliable data to support future CDC guidance. NIST building researchers simulated multiple scenarios of a portable generator operating outside of a one-story house, using both a test structure and two different computer models—the NIST-developed CONTAM indoor air quality model and a computational fluid dynamics model. The simulations included factors that could be controlled by humans, such as generator location, exhaust direction and window-opening size, and environmental factors such as wind, temperature and house dimensions. In the simulations the generator was placed at various distances from the house and tested under different weather conditions. “We found that for the house modeled in this study,” researcher Leon Wang says, “a generator position 15 feet away from open windows was not far enough to prevent carbon monoxide entry into the house.” Winds perpendicular to the open window resulted in more carbon monoxide entry than winds at an angle, and lower wind speeds generally allowed more carbon monoxide in the house. “Slow, stagnant wind seems to be the worst case because it leads to the carbon monoxide lingering by the windows,” Wang explains. Researchers determined that placing the generator outside of the airflow recirculation regions near the open windows reduced carbon monoxide entry. In the next phase of the study NIST will model a two-story house that researchers believe will interact with the wind differently. NIST researchers also have worked with the Consumer Product Safety Commission on related work. (See: “NIST to Study Hazards of Portable Gasoline-Powered Generators,” NIST Tech Beat, March 5, 2008.) The generator study can be downloaded at <http://fire.nist.gov/bfrlpubs/build09/PDF/b09009.pdf>. \* L. Wang and S.J. Emmerich. Modeling the Effects of Outdoor Gasoline Powered Generator Use on Indoor Carbon Monoxide Exposures. (NIST Technical Note 1637,) 2009.

Echolink – A voice over internet protocol for connecting Amateur Radio Operators across great distances or just across town. Hopefully, you’ve taken advantage of this exciting opportunity on the 440 repeater. The 440 repeater is located on top of Cramer Hall on the campus of Ferris State University and transmits on 443.9 MHz with a +5 offset.

The Echolink ([www.echolink.org](http://www.echolink.org)) linking system is available on the 440 repeater three ways. First, you are able to connect to remote nodes around the world by using some simple commands and node number right on the 440 repeater. The on air commands are as follows:

Connect: DTMF C, node number of desired station. (four to six digits)

Disconnect: DTMF # or ##.

The second way to connect is from another Echolink repeater or link system. Connect to the K8FSU-R or 389477 node. Echolink repeaters and links may use a variety of commands to initiate a connection. Please check with that system’s operator for a list of available commands and use guidelines.

The third way is via the Echolink software. Follow the software instructions to connect to the K8FSU-R or 389477 node. If you need additional information about Echolink see [www.echolink.org](http://www.echolink.org) or [www.braarc.net/Clubhouse.html](http://www.braarc.net/Clubhouse.html).

Sample of stations and locations that have connected to the 440 echolink link over the last month.

DD6VG	Thomas	JO43th
K5PHR	John	Tulsa, OK
K8BK	Barry	Mesa, AZ
K8PLW-R	K8PLW-Repeater	Auburn Hills, MI 1
K8YPN	Dick	
KA9KWR	Dave	Fox River Gorge
KB8TYJ	Tom via W0DK-R	(node number 6664)
KC8UJR	CONF	Mission, TX (1)
KC8WGA	David Huhtala	BIG RAPIDS, MI
KD8CXQ	JUSTIN	
KD8DHZ	Steven	Barryton, MI
KD8ENL	kevin	
KD8KAN	SHAUN	HOLLAND MI (1)
KD8PA	greg	In Conference *ECH
KF5DJA	brian	
KL0DP	Dan	Fairbanks, Alaska,
LA3MSA	Ingar	Rjukan, Norway
MB7IBH-L	CONF	Ferndown DORSET (2)
N0DNE-L	Denver, CO	
NOEPA-R	Dean	Longmont, CO 448.5

N3YEA Jeff  
 N8DAD Barry  
 N8NBZ Mike Carson City, Mi.  
 VA2FP fabrizio Laval  
 VK2FRMC rick Glenmore Park AUST  
 W0DK-R (W0DK-R EchoIRLP) CONF Boulder, CO  
 W4GTE David  
 W8OT Earl  
 W8OT Earl  
 WA4FRJ Don MacConnel Big Rapids, MI  
 WD8IZB Paul Crossville TN. 3

Submitted by: Mike, KD8DIB

<b>BRAARC MEMBERSHIP</b>			
<b>APPLICANT INFORMATION</b>			
Name:			
Call:	Class:	Phone:	
address:			
City:	State:	ZIP:	Email:
ARRL Member: <input type="checkbox"/> Yes <input type="checkbox"/> No	Newsletter: <input type="checkbox"/> US Mail <input type="checkbox"/> Website – minimizes postage and printing costs		
<b>SPOUSE INFORMATION IF JOINT MEMBERSHIP</b>			
Name:			
Call:	Class:	Email:	
<b>LICENSED CHILDREN</b>			
Name:	Call:	Class:	
<b>DUES / DONATION</b>			
<input type="checkbox"/> Member (\$25) <input type="checkbox"/> College Student(\$12.50) <input type="checkbox"/> Youth(free if oldest licensed family member<18 yrs)			
<input type="checkbox"/> Club Patch ____ X \$5 each - The club patch supports the repeater systems operated by the club.			
<input type="checkbox"/> Donation – general support for the club. <input type="checkbox"/> Repeater Donation – supports club repeaters			
<b>Total:</b>			

Membership runs from January 1 to December 31 each year. Please submit dues by the regular February club meeting to prevent accidental removal from club roster.

The Way We Hear It  
WA4FRJ

Swiss university students designed a satellite that was successfully put into orbit. The tiny satellite, a cube about 4 inches on a side, uses communications that include a beacon signal with 120mW of power, 10 bits/sec in Morse code at 437 MHz. This is a remarkable accomplishment. Learn more about it at: <http://swisscube.epfl.ch/>

Solar shingles available in 2010. Dow Chemical has shown a new product for roofing that generates electricity. The solar cell-shingle uses CIGS, or copper indium gallium diselenide, a material that is greater than 10% efficient at turning sunlight into power. This is lower than some silicon base solar cells but is 15% less cost per watt than other solar shingles. Stay tuned on this one!

Vacuum tubes are still alive and well in high power radar and some broadcast equipment. Capable of generating millions of peak watts, specialized radar tubes offer robust service and are more immune to certain types of failure from power glitches and lightning strikes. We like to include items about vacuum tubes so the editor can reminisce about the good 'ol days.

CFL (compact fluorescent bulbs) are not popular with many who have tried them. As previously reported, erratic life, poor light quality and high harmonic current draw are seen as drawbacks. (Please see the August '09 club newsletter, Tech Corner article.) There is a story going around that CFL's have caused fires. We think that's urban legend. The electronics in the CFL's we've taken apart all had internal thermal fuses for protection. Shorts in fixtures can cause fires but CFL's seem like an unlikely fire source. We'll take the fire story with a large grain of salt.

Kiss them goodbye. 100W standard light bulbs will no longer be manufactured in the U.S. or imported after 2012. The 2007 Energy Independence and Security Act imposes impossible standards for these and other common lamps. The idea is to save energy by forcing us to replace this common incandescent bulb with other types of lamps, primarily compact fluorescent lamps (CFL's). This example of forced technology use is meeting increasing resistance and anger. The U.S. is following Europe where similar standards are being imposed to cut energy usage. We're not betting on the outcome as more people learn about this and other well intentioned but poorly thought out acts.

Band activity is picking up. Ham bands normally pretty dead at certain times of day, 20 meters at night for example, are coming alive. KC8WGA, David, reports QSO's at night with Rhode Island and Massachusetts.

As we write this at night we hear stations in Maryland and Texas on our new 20 meter center fed wire dipole. This was a gift from club members KC8WGA, David and his father Jon, N8ZH. They thought it was about time for me to get on HF.

They were absolutely right; I quickly learned that HF is loads of fun and full of surprises!

## CRANKERS CELEBRITY SERVE

A number of club members serve and bus table  
at Crankers



Just waiting for the rush!! You can see we're primed and waiting with anxiousness.

Don, WA4FRJ, serves a little ketchup,  
his specialty



Jim, K4UIH, double checks  
the order. Recognize the  
customers?



Tricia, KD8KPU, helps satisfy some happy customers.

A Great Evening for a Parade and a Great Float with lots of help.  
Thanks to everyone who worked on the float  
and joined in the festivities





ALL LIT UP AND READY TO ROLL!!



LOTS OF CANDY WAS PASSED OUT TO HAPPY RECIPIENTS

Editors Note: There were a number of great pictures taken at the Crankers Celebrity Serve and the Parade. Please do not feel slighted if I missed your mug shot in this letter. In an effort to keep the letter to ten pages (actually 11 this time) I tried to pick photos that were representative of the activities, and make them large enough to be viewable. If this has not worked out please let me know but I hope the photos in this letter are acceptable.

**December 2009**  
**PO Box 343 Paris MI 49338**

