



# HAMLETTER

Published Monthly  
Wheaton Community Radio Amateurs  
Issue 570      Founded 1948      Mar 2011



The membership of WCRA enjoyed a very informative presentation by Kermit Carlson, W9XA, ARRL Central Region Vice Director, during the February monthly membership meeting. Kermit brought us up to date on subjects that the ARRL is working on and gave a virtual tour of ARRL HQ.

Join us for the 20th annual Advanced Severe Weather Seminar.  
Sponsored by the DuPage County Office of Homeland Security and Emergency Management, (See page 5)

**WCRA Staff**

**Elected Officers**

President	Steve, N9OA
Vice President	John, WT9Y
Secretary	Kevin, AB9RN
Treasurer	Ken, N9HQ
Custodian	Bruce, KA0DSF

**Volunteer Committee Chairs**

Club Call Trustee	Tom, N9CBA
Christmas Party	Ruth , KA9RZG
Club Awards	John, N9MWF
Elmer/Know-Code	Charlie, WB9SG
Field Day	Dale, NJ9E
Hamfest	John, WT9Y
Refreshments	John, WT9Y
Membership	Paul, KA9RVS
Public Service	Steve, N9OA
VHF/HF Awards	John, N9MWF
Webmaster	Tom, N9WBW

**Amateur License Staff**

Training Classes	Charlie, WB9SGD
Volunteer Exam.	Harry, K9HK

**WCRA Repeater Administrative Board (RAB)**

Chairman	Don, N9NYX
Secretary	George, KA3HSW
Member	Rich, N9DKO
Member	Larry, KA9KDC

**WCRA Radio Nets**

Sunday 8:00 pm 145.310/(-600) Net Control: Rotates

**WCRA Repeaters**

145.310/ 144.710	103.5(1A) or 107.2(1B) PL Encode/Decode
224.140/222.540	Carrier Access
444.475/449.475	114.8 Hz(2A) PL Encode/ Decode

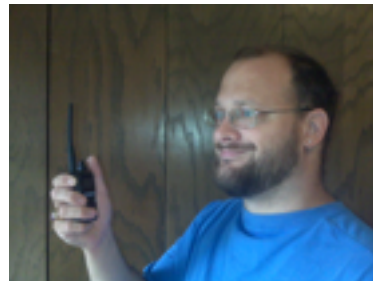
**HAMLETTER**

Editor	Don, N9NYX
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Features	Jim, W9DHX

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This publication uses QuarkXPress 8.12 and Photoshop CS3



# From the President's Gavel

by Steve, N9OA WCRA President

Friends,

I found the gavel! Hopefully I will remember to bring it when I leave home Friday morning so it will make it to the meeting. Speaking of meetings, if you missed out on an excellent program last month, don't miss this month's program on the satellites and software written by our own Kevin AB9RN. Every one including his son COLIN will be sure to enjoy it.

Meteorological winter is over! Spring will soon spring which will mean it will be soon time for our picnic, field day and a multitude of public service events.

Until next month, 73...

A hooded robber burst into a Texas Bank and forced the tellers to load a sack full of cash. On his way out the door a brave Texas customer grabbed the hood and pulled it off revealing the robber's face. The robber shot the customer without a moment's hesitation. He then looked around the bank and noticed one of the tellers looking straight at him. The robber instantly shot him also. Everyone else, by now very scared looked intently down at the floor in silence. The Robber yelled, "Well, did anyone else see my face?" There are a few moments of utter silence, In which everyone was plainly afraid to speak. .... Then one old man tentatively raised his hand and said, "My wife got a good look at you."

THE CLUB IS ALWAYS LOOKING AND IN NEED OF PEOPLE TO VOLUNTEER FOR VARIOUS POSITIONS. IF INTERESTED, PLEASE CONTACT ANY OF THE OFFICERS. WHO KNOWS IT MAY BE A CHANCE TO START A LIFETIME JOB.....

# WCRA Meeting Minutes

Kevin, AB9RN  
WCRA  
Secretary



## Wheaton Community Radio Amateurs Agenda for February 4, 2011 First Presbyterian Church, Jefferson and Ellis, Wheaton, IL

### CALL TO ORDER

The meeting was called to order at 7:30 pm by Steve, N9OA,  
President

In attendance: N9OA, WT9Y, WA9VAA, W9DHX, AJ9M,

NV9R, KB9RTO, N9MWF, W9BK, KA9RZX, KB9RCO, W9XA, KB9LBG, N9DKO, WB9SGD, KB9RVS,  
NJ9E, KC9Q, K9WXV, KA9KDC, N9NYX, W9NJM, WA9E

Approval of Agenda                      Presiding Officer    Approved by unanimous consent.

### INTRODUCTION OF MEMBERS AND GUESTS AND OPENING REMARKS

Introductions                      Entire Assembly

Opening Remarks                Any Board Member

Tonight's program                John, WT9Y    Presentation to be presented by W9XA ARRL Central Region  
Vice Director gave a virtual tour of ARRL HQ.

### BREAK FOR REFRESHMENTS

**MEETING PROGRAM** – Virtual Tour of ARRL HQ by Kermit Carlson, W9XA

### APPROVAL OF MINUTES FROM LAST MEETING

### OFFICER REPORTS

President                              Steve, N9OA

Vice President                      John, WT9Y    Next month will be a software presentation

Secretary                             Kevin, AB9RN

Treasurer                            Ken, N9HQ    Account Balances submitted.

Property Custodian                Bruce, KA0DSF

### STANDING COMMITTEE REPORTS

Public Service                      Steve, N9OA    Next is Special Olympics. More details to follow.

CSU                                      John, N9MWF    Thank you to those who visited the CSU at the hamfest.

Joe did a lot of work. Comments from the fest include: Did you buy this from a TV station. West Mountain Radio took pictures of the Powegate setup and use it for advertising. A bit of refining remains.

Hamfest                                John, WT9Y    Mary did a fine job getting manpower. Bumps in the road got filled. The forum speaker. The fest financial were not as good as last year. The last of the Drake estate items was retired.

Club Awards                         John, N9MWF    No report.

Field Day                               Dale, NJ9E    2011 FD rule change. It is not really a change.

Christmas Party                      Dale, NJ9E    Will be in December.

Hamletter                              Don, N9NYX    Always looking for pictures and articles. Look for the e-mail

RAB                                        Don, N9NYX    In the process of trying to move the 220 machine on the police station tower or another tower in the city.

# QST–March 2011–Spring Antenna Issue Here!

By Jim Ward, W9DHX

## **TWO BIG ANTENNA ARRAYS ARE ON THIS MONTH'S COVER**

The inset photo shows the top of the WIAW 60' tower at Newington, CT., and the monster beam with the plastic owl on top belongs to Ray Kassis, N4LEM of Cocoa, FL. The issue features a host of long wires, beams, and mobiles. "In the Spring, a ham's fancy turns to thoughts of antennas." You'll get plenty of ideas in this March issue.

## **TOP 20 "MOST WANTED ENTITIES" DEFINED FROM DX MAGAZINE SURVEY**

Bernie McClenny's "How's DX" column on page 92 gives you the latest news, plus a list of the hard to get 2010 list; leading is North Korea (P5), followed by Navassa (KP1), Bouvet (3Y/B), and Yemen (70). If you want to try out your newest antenna, read what Bernie has to say on how to break through the pileups. Good photos of some rare QSL cards.

## **DON MOTZ' PHOTOS MAKE PUBLIC SERVICE REPORT ON CHICAGO MARATHON**

Page 82 tells the story of "a dozen radio clubs" and the 105 volunteers who supported the world class event with well planned hams and their equipment. The WCRA was there, especially HamLetter editor Don Motz, N9NYX. Four excellent photos were picked to illustrate the story.

## **SOUTH CAROLINA HAM TRAILER DIRECTS RAILROAD ANNIVERSARY EVENT**

The next page after Don's pictures shows a trailer that looks like the WCRA CSU; however, it doesn't have our colorful signage! The story gives a report on how they used APRS to follow the progress of the parade lineup. Another option for our work with the Wheaton July 4th Parade!

## **RADIO PIONEER STORIES FROM JOHN DILKS' VINTAGE RADIO FEATURE**

John starts on page 102 to tell some of the colorful history of pre-license days and early ham meetings. Among early organizers was Henry P. Boughton, K2AE, whose career is covered in this two page article, complete with photos and a vintage station.

## **HANG GLIDER FANS USE HAM RADIO TO IMPROVE SAFETY**

Bill Schell, W4UHE, writes two pages of advice to hang glider pilots who want to reduce their danger. His photos show how to rig antenna in your flying harness and work with a flight director on top of the mountain. The director "steers" the glider pilot toward favorable updraft areas, plus good spots to use as a landing area. Look on pages 71 and 72.

## **SPECIAL ANTENNA SUPPLEMENT – PAGES 129 TO 136—8 PAGES –CHECK IT OVER**

### **(Severe Weather Seminar continued from Page 1)**

the seminar will be held on Saturday March 12, 2011, from 8:00 AM until 3:30 PM. Amy Freeze, Chief Meteorologist at Fox News Chicago, is back by popular demand as the program emcee. The Advanced Weather Seminar is geared toward those individuals who will be on the front lines of the weather warning system, including spotters, amateur radio operators, emergency management personnel, police, fire, educators, public works and utility workers. This spotter seminar is designed to provide continuing education to trained spotters who wish to broaden their understanding of advanced weather phenomena.

Scheduled highlights include:

- Back to Basics – Not Basic Training: The spotter's role in the severe weather process & what you need to know
- QLCS (Squall Line) Spotting – Case Study of the June 18th Derecho
- Storm Damage Surveys
- Building Safety & Becoming Storm Ready
- Q&A Panel with the Experts
- And many others....

### **NEW LOCATION!**

The seminar will be held at Tellabs in Naperville:

One Tellabs Center

1415 West Diehl Road

Naperville, IL 60563

**THIS IS NOT A FUNCTION OF TELLABS.**

### **REGISTRATION INFORMATION**

Advanced Weather Spotter Seminar - \$35.00

Registration fee includes a continental breakfast, lunch, and a special give-a-way. All registrations with payment must be received no later than Friday February 25, 2011.

### **PLEASE NOTE**

**PAYMENT MUST BE MADE AT TIME OF REGISTRATION, OR THE REGISTRATION WILL NOT BE ACCEPTED. NO WALK-IN REGISTRATIONS OR PAYMENTS AT THE DOOR WILL BE ACCEPTED.**

### **REGISTRATION OPTIONS**

1. Online registration and payment is available at <http://dupagesevereweather.com>. Payment must be made at time of online registration.
2. Mail-in registration and payment by check payable to DuPage County OHSEM, 136 N. County Farm Rd., Wheaton, IL 60187, will also be accepted. (Registrations without payment will not be accepted. A registration confirmation notice will be e-mailed to you upon receipt of registration. If no e-mail address is provided, a confirmation will not be sent.)

### **REFUND POLICY**

Registered individuals who find it necessary to cancel must contact the DuPage County Office of Homeland Security and Emergency Management at (630) 682-7925 as soon as possible. Cancellations received on or before the refund cut-off date of Friday February 25, 2011 by 12:00 noon, will receive a full refund. Refunds will not be possible for cancellations received after the refund cut-off date as materials and food will already have been ordered.

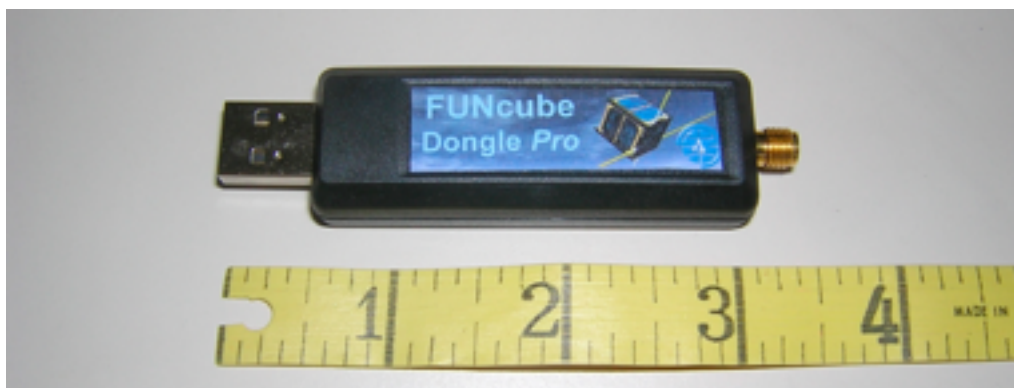
## The FUNcube Dongle Pro: A Powerful Software-Defined Receiver in the Palm of Your Hand George Henry, KA3HSW



Image used by permission of G6LVB

Sometime in mid-2011, AMSAT-UK will launch the FUNcube satellite, a 10cm x 10cm x 10cm cubesat whose primary mission is as an educational tool for British school-children. The satellite will carry a 20 kHz-wide UHF to VHF linear transponder, in addition to a VHF-FM telemetry transmitter. Schoolchildren will be able to receive and decode telemetry transmissions, listen to QSO's taking place on the transponder, and, with the assistance of a licensed ham, even be able to talk with other schools via the satellite.

In order to make the reception of telemetry transmissions as easy and inexpensive for schools as possible, the FUNcube Dongle software-defined receiver (SDR) was developed. A small USB dongle (Fig. 1), it can be plugged into the USB port of a computer, and with a simple antenna and any one of a number of free SDR programs, schools can receive the VHF telemetry signals at minimal cost.



The FUNcube Dongle's developer, Howard Long, G6LVB, quickly realized that an expanded version of the Dongle would be of interest to many satellite enthusiasts, and the FUNcube Dongle Pro evolved. With an extended frequency range of 60 MHz to beyond 2.4 GHz, the Dongle Pro is a powerful receiver in a very tiny package! Its capabilities are limited only by the software used. Most SDR programs provide AM, FM, SSB, and CW demodulation directly to your computer speakers or headphones, but by using the Virtual Audio Cable, the Dongle's output can be fed to any of the popular sound card programs for PSK, Throb, Hellschreiber, SSTV, RTTY, you name it!

The Dongle appears to the computer as a sound card, and any program capable of receiving the standard I and Q outputs of a software-defined receiver will work with it. A separate dynamic link library (DLL) allows the software to tune the receiver. Alternatively, a fully-featured front-end program (Fig. 2) allows you to set the operating frequency, filtering, and gain of each of the Dongle's stages. A separate satellite downlink frequency control program (Fig. 3) is also available which will set the appropriate frequency for a given satellite, and  
**(Continued on page 8)**

## Join us for the 20<sup>th</sup> annual Advanced Severe Weather Seminar.

Sponsored by the DuPage County Office of Homeland Security and Emergency Management, the seminar will be held on **Saturday March 12, 2011**, from 8:00 AM until 3:30 PM. Amy Freeze, Chief Meteorologist at Fox News Chicago, is back by popular demand as the program emcee.

The **Advanced Weather Seminar** is geared toward those individuals who will be on the front line of the weather warning system, including spotters, amateur radio operators, emergency management personnel, police, fire, educators, public works and utility workers. This spotter seminar is designed to provide continuing education to trained spotters who wish to broaden their understanding of advanced weather phenomena. Scheduled highlights include:

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- Q&A Panel with the Experts
- And many others....

### **NEW LOCATION!**

The seminar will be held at Tellabs in Naperville:

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1415 West Diehl Road  
Naperville, IL 60563**

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Website	Tom, N9WBW	Up and works.
Training	Charlie, WB9SGD	No report.
Program	John, WT9Y	
Public Relations	Mark, W9UZ	
Membership	Paul, KA9RVS	Accepting renewals. Thank you to those who have
Old new member is rejoining,	AE9JG.	Motion W9DHX, Second NJ9E. Motion passed.
VE Program		The session at the fest was successful.

**UNFINISHED BUSINESS**

Mission Statement AB9RN / W9BK / N9WBW Working on it.

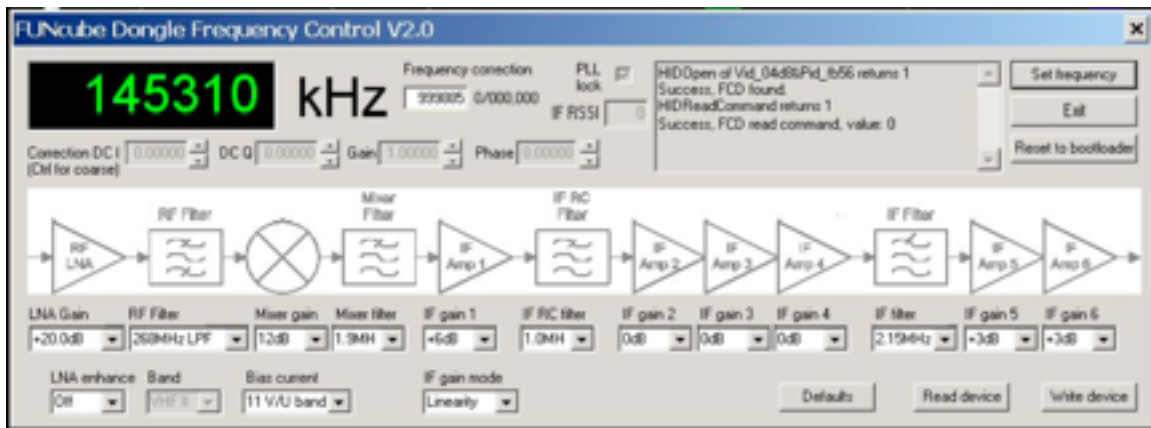
**NEW BUSINESS** None.

**ANCHORS, ANNOUNCEMENTS, COMMENTS FROM MEMBERSHIP/GUESTS**

**ADJOURNMENT** Meeting adjourned at 9:27 pm

adjust for Doppler shift during the satellite pass.

Below is a screen shot of the FUNcube Dongle Pro receiving the WCRA 145.31 repeater, using the WR-Plus SDR program. If you look closely, you can even see the modulation of the carrier by the repeater's CW ID.



Note that the repeater's signal isn't much above the noise floor: if you live in a high-RF area (as most Club members do), some form of front-end filtering or a preselector is highly recommended for such a broad-banded receiver.

At the time I bought my Dongle, they were being hand-assembled and sold through PayPal in small batches, and they typically sold out in under 30 seconds. It took me three tries before I succeeded in "winning" one out of a batch of 130. Some tips to success are: make sure your clock is accurate, so that you can click the "Buy





Now” button exactly as the sale begins; log into PayPal ahead of time (this has worked for some, but did not work for me: if pre-login doesn’t work, type your PayPal password into Notepad, highlight and copy it, then you can paste it into the PayPal login screen), and have your shipping address and method of payment pre-selected in PayPal so that you can just click “Pay Now” to complete your purchase. At the equivalent of about \$175.00, it’s a LOT of receiver in a very small package!

For more information, or to order your own FUNCube Dongle Pro, go to [www.funcubedongle.com](http://www.funcubedongle.com) . There are also Yahoo! groups for users and developers at <http://groups.yahoo.com> .

## New Location for Weather Spotting Seminar

The popular Severe Weather Seminar is moving from the traditional Wheaton College location to a new site on Diehl Road in North Naperville—the Tellabs Building. The registrations closed on Friday the 25th, so there will be a big near capacity crowd will be present. Plan to arrive early to enjoy the continental breakfast that begins at 8 a.m.

Parking has improved from the multi-lot situation at the College; Tellabs has one large lot and is set to handle the crowd. The street address is 1415 West Diehl Road, Naperville, and highly visible from the arterial road which parallels I-88.

Program Emcee is Amy Freeze, Chief Meteorologist at Fox News, Chicago. The Seminar is geared toward individuals who will be on the front lines of the weather warning system. It is designed to provide continuing education for those who wish to broaden their understanding of advanced weather phenomena.

Lunch is included in the program fee, as well as a special give away. The program is scheduled to close at 3:30 p.m. The event is not a function of Tellabs. The Seminar website is:

[www.dupagesevereweather.com](http://www.dupagesevereweather.com)

73

### Copper Wire

After having dug to a depth of 10 feet last year, New York scientists found traces of copper wire dating back 100 years, and came to the conclusion that their ancestors already had a telephone network more than 100 years ago.

Not to be outdone by the New Yorkers, in the weeks that followed, a California archaeologist dug to a depth of 20 feet, and shortly after, a story in the LA Times read: 'California archaeologists, finding traces of 200 year old copper wire, have concluded that their ancestors already had an advanced high-tech communications network a hundred years earlier than the New Yorkers.'

One week later, The Pioneer Press, a local newspaper in Minnesota , reported the following: After digging as deep as 30 feet in his pasture near Embarass , Minnesota , Ole Olson, a self-taught archaeologist, reported that he found absolutely nothing. Ole has therefore concluded that 300 years ago, Minnesota had already gone wireless.

Thank Heavens for Ole.

Who said Minnesotans are hicks?

# Wheaton Community Radio Amateurs

## Membership Application

P.O. Box QSL, Wheaton, Illinois 60189

Dues

Office Use Only

Full Member \$26  
Student/Senior Citizen \$13  
Associate (No License) \$13  
Club Badge \$7

Year ..... Amt Paid .....  
Check ..... Cash .....  
New ..... Renew .....  
Membership Type Full Associate  
Student Sr Citizen  
Family:  
Full member call sign: .....  
Name on Badge.....

Family Memberships Available

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

License Class \_\_\_\_\_ Expiration Date \_\_\_\_\_

Address \_\_\_\_\_ Apartment # \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone: Home (\_\_\_\_\_) \_\_\_\_\_ Business (\_\_\_\_\_) \_\_\_\_\_

EMAIL Address \_\_\_\_\_

ARRL Member Yes OR No (Please Circle One)

Sponsor (new members only) \_\_\_\_\_

WHAT CLUB EVENTS WILL YOU VOLUNTEER YOUR SERVICES FOR?

Please circle those which you might be interested in working or serving as a Committee Member

HAMFEST (January)	FIELD DAY (June)	VE TESTING	JULY 4TH PARADE
PICNIC (Aug)	CHRISTMAS PARTY	TRAINING	MEMBER RETENTION
ASSISTANCE (Elmer)	CLUB TRAILER		

OTHER \_\_\_\_\_

COMMENTS \_\_\_\_\_

APPLICANT'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

It is that time of year again to think about sending in a check to renew your WCRA Club Dues. (See application on page 11) Or you can hand deliver your check to Ken at this Friday's General Membership meeting. We have elections next month and to be able to vote, your dues must be current.

## ANCHOR ANCHOR ANCHOR

I'm selling everything related to the tower (Mosely yagi, rotator, wire, mast, etc.) and I have no price at the moment, but I'm quite willing to consider all offers. I'll be leaving Wheaton.  
Regards,  
John, N9NA

## MEETING DATES FOR 2011

3/4

4/1

5/6

6/3

7/8

9/9

10/7

11/4

There will be a Club Pinnic in August and a Christmas Party in December in lieu of a regular membership meeting.

# OUR MEMBERS THAT CELEBRATE A BIRTHDAY IN THE MONTH OF MARCH



KURT	KB9RTO
ROBERT	W9BK
MIKE	N9KYG
BRUCE	KA0DSF

If you do not see your birthday listed here in your birth month, please contact the editor with your information.

YOU! COULD BE FILLING THIS SPACE WITH  
AN ARTICLE YOU HAVE WRITTEN.

## MARCH CALENDAR OF EVENTS:

- 3rd: Club Brunch **1st & 3rd** Thursdays 10:30 AM at Peppercorns. Peppercorns is located at the corner of President and Geneva Road in the shopping center on the North side of Geneva. All are welcome.
- 4th: Monthly membership meeting at First Presbyterian Church in Wheaton, 615 W. Jefferson Ave. at 7:30pm. Talk-in on 145..31. Program this month is on satellites and programs written and presented by Kevin AB9RN.
- 20th: DEADLINE FOR HAMLETTER SUBMISSIONS for April.
- 24th. VEC testing at the Helen Plum Library in Lombard from 6:30 till 8:30pm. Go to the club VE Testing website at [vetesting.harrykamer.com](http://vetesting.harrykamer.com) for the latest details. No testing on December.

Remember the Club net on 2M is held every Sunday evening at 8 PM local on 145.31 (-) unless it isn't.

**Next WCRA General Membership Meeting Mar 4th, 2011, First Presbyterian Church 615 W. Jefferson Ave., Wheaton, Illinois 7:30 PM**

WCRA was founded in 1948 and continues to be involved in all facets of Amateur Radio supporting the healthy growth of the hobby through diversification and participation. Our members have always been our most important asset and we would like to see you join us for our next meeting. Our business meetings are followed by a break for conversation, coffee, soda pop, and fat pills. This is followed by an amateur radio related program. We would like to see you there to share the enthusiasm.

## HAMLETTER

Club and HamLetter Mailing Address:

Wheaton Community Radio Amateurs  
P.O. Box QSL  
Wheaton, Illinois 60187  
eMail: donlin67@gmail.com

**First Class Mail**