



FOX CITIES AMATEUR RADIO CLUB

QSO'ER



Volume 14, Issue 18

April 2001

may 21 Next club meeting
April 23 at 7:00 PM
 at the Columbus Club
 2531 N. Richmond St. Appleton

may 28? Next meeting will be

Nominations for Club Election
 For further details, prior to the meeting you may
 contact Pat Latour K9IK

Next board meeting will be
April 30 at 7:00 PM
 Meeting is held at Mr. Cinders West.
All are welcome

Meeting Minutes

The March meeting was called to order on the 19th
 of March 2001 by Pat Latour K9IK at 7:05PM.
 All meeting minutes were approved as listed in the
 newsletter. Meeting was adjourned at 7:50 PM
 The Program was on Dxing presented by
 Gerry Radtke.

CLUB OFFICERS

President

Patrick Latour K9IK
 PLatour428@aol.com 725-1149

Vice President

Jon Oldenburg AB9AH
 ab9ah@w9zl.ampr.org 832-9727

Treasurer

Dave Sprangers N9ZHZ
 dopyro@aol.com 722-2515

Secretary/Newsletter Editor

Al & Judy Van Dynhoven KB9BYQ / Brian Long
 kb9byq@tponet.com 830-1859

Membership Coordinator

Steve Lamers N9SGG
 stevel@itol.com 749-8824

Members At Large

Steve Pelletier KB9OAL
 kb9oal@new.rr.com 734-9457

Bill Vincent N9TNW
 wvincent@execpc.com 739-6827

Chuck Hanson N9OEQ
 chanson1@new.rr.com 788-5497

INSIDE THIS ISSUE

- 1 Club Information
- 2 March Attendance, HamPilot- QSO logger for the Palm Pilot, AREs Repeaters
- 3 Board Meeting Discussions
- 4 Club Program Survey Results submitted by WD9FLJ
- 5 Great Ground with Kitten Litter
- 6 Relief For Hams In Sight
- 7 Relief For Hams In Sight cont...
- 8 Propagation Forecast Bulletin 4/15/01

Club Website

<http://www.w9zl.ampr.org/>

Any suggested changes/additions for the web page need to be submitted to Steve Lamers - stevel@itol.com. Suggestions will be brought before the board pending approval.

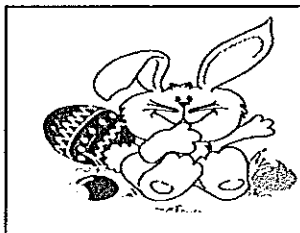
March Club Meeting Attendants

John Ensley	N9RJZ
Chad Pennings	N9PRC
William Vincent	N9TNW
Wayne Pennings	WD9FLJ
Al Van Dynhoven	KB9BYQ
Judy Van Dynhoven	
Steve Lamers	N9SGG
Dave Sprangers	N9ZHZ
Richard Sonnenberg	W9UVZ
Helen Borree	WD9CYW
Roy Hoyer	WB9QKW
Larry Wilfer	N9WNS
Steve Pelletier	KB9OAL
Pat Latour	K9IK
Lester Morse	KA9LAR
Glen Windler	N5SOM
Erick Jensen	KB9TLM
Gerry Radtke	WA9OEQ
Chuck Hanson	N9OEQ
Karen Thorne	WB9ZNA
Brian Long	KB9LRD
Jon Oldenburg	AB9AH

HamPilot - QSO logger for the Palm Pilot

Christopher Williams (N9WLC) on March 21, 2001

I've just finished work on a handy little tool for the Palm family of devices called HamPilot. It is basically a QSO logging program that will allow you to add, delete, search, and edit your QSOs away from the shack. It is certainly powerful enough to replace your current logging scheme. If you are interested in trying it out, a trial version can be downloaded from www.palmgear.com (search for hampilot.) Any comments or suggestions are always appreciated too. Look for other ham radio software for the Palm coming soon!
73, Chris -- N9WLC n9wlc@arrl.net



HAVE A HAPPY EASTER!

March Board Meeting Attendants

Jon Oldenburg	AB9AH
John Ensley	N9RJZ
Steve Lamers	N9SGG
Bill Vincent	N9TNW
Al Van Dynhoven	KB9BYQ
Judy Van Dynhoven	
Brian Long	KB9LRD
Dave Sprangers	N9ZHZ
Pat Latour	K9IK
Steve Pelletier	KB9OAL
Chuck Hanson	N9OEQ

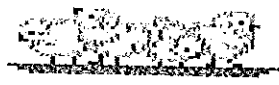
ARES / SKYWARN NET REPEATERS

147.240	WINNEBAGO COUNTY
146.655	OUTAGAMIE COUNTY
147.300	CALUMET COUNTY
145.410	WAUPACA COUNTY
145.350	SHAWANO COUNTY
146.835	BROWN COUNTY

PASS - COUNTY LIAISON REPORTING NET

147.270	PASS / NWS NET - GRB-NWS CENTRAL & NORTHERN COUNTIES
145.190	PASS / NWS NET - GRB-NWS SOUTHERN COUNTIES

NOTE: The future newsletters will be copied and printed by Brian Long KB9LRD on paper donated by Glatfelter Company.



Board Meeting Topics Discussed

At the March board meeting, the agenda was:

- **Hamfest locations:** N9RJZ John - Sabre Lanes was voted as the chosen site & a deposit was put down for November 3 & 4.
A decision on tables needs to be made – whether to rent or if the club can come up with enough tables.
- **Bi Laws** - it was voted unanimously that there will be only one official copy with the date of May 1999 and will have a revision date included. This copy will be kept by the board. A copy will always be available upon request, at each club meeting.
- **Treasurer's Report** – voted unanimously that the treasurers report will no longer appear in the newsletter but will be available upon request at all club meetings.
- **Club Membership dues:** will be discussed and voted upon after the budget review has been completed
- **Budget review** - committee consists of Dave Sprangers, Steve Lamers, Brian Long, and Helen Borree
- **Newsletter** – the newsletter will be put into PDF format, still need to decide whether to email entire document or just send email to members indicating it is available on the club website to view.
- **Expert User contact list** – next club meeting there will be a sign up sheet sent around for

TREASURER'S REPORT

**A detailed report can be seen at any club meeting or contact the club treasurer Dave Sprangers N9ZHZ.

HAM DINGER NET

Fox Cities Amateur Radio Club W9ZL

*145.330/R 100hz PL
Wednesday eve at 7:30pm*

HAM DINGER NET

Everyone is Welcome to check in!

FCARC CLUB PROGRAM SURVEY RESULTS

In an effort to provide quality program for future FCARC meetings, please take a moment to complete this survey. We would like the programs to reflect what it is that **YOU** would like to see or learn more about. Feel free to make notes that indicate your feelings and or choices on this sheet. Thank you.

Club programs should be: (Out of 18 surveys returned)

Amateur radio related only - 2

A combination of Amateur radio and other Electronic subjects - 14

Topics of general interest - 6

I don't care... I seldom stay for programs - 0

From the following list, please put a check mark next to subjects that you think may be good for programs. (5 checked all areas listed)

Contesting - 12

Dxing - 10

Old/Antique Radio - 10

Traffic Handling - 9

Logging - 6

CW - 10

HF - 10

VHF & UHF - 10

Constructions Projects (including antennas) - 12

Trouble-shooting your own equipment repairs - 7

Digital modes - 13

QRP - 11

Public Service - 12

Antennas - 10

Operating Tips - 9

SSB - 11

APRS - 11

Software - 10

Please list problem areas - Any relative to amateur radio, Solid-state control devices, Antennas, Power supplies, Computers, Satellite operating

If not Amateur radio related, please list some of the topics that you would like to have presented.

Digital TV

ATV

GPS

Satellites

Remote Control

Some theory

Phasing principles relative to antennas

Recipes about ham products

Start a ham radio class (this person is a newcomer to our club and he volunteered to do this himself).

Great ground with kitten litter

By Guy Atkins

hcdx list, August 10, 2000

Bentonite is great for getting an excellent conductive ground. Bentonite?

That's the stuff used in clumping kitty litters. I had forgotten that the "clumping" litters are Bentonite. The brand we buy for our Siamese cat says that it's "a natural clay product...". That's the Bentonite!

If you can locate a supply of the mineral called Bentonite, it makes an excellent ion-rich (and non-corrosive) backfill for ground rods and grounding systems. Professional antenna installations and electrical substations use Bentonite for lowering the resistance to earth. I have read that Bentonite is sold at animal feed stores; it is used as an additive to cattle & pig feed. Also, ceramic supply stores sometimes carry Bentonite, as it is a special clay used by potters.

During a vacation one year, I got my initial supply of Bentonite directly from a refinery in Wyoming where they mine the stuff... they gave me some bags of Bentonite free because the bags were slightly ripped and they couldn't sell them.

To use the Bentonite, you dig a hole eight inches or more in diameter, perhaps three feet deep (post-hole digger helps), and suspend the ground rod in the middle. Put in a few inches of the powdered or crushed Bentonite, water it thoroughly (it swells up tremendously with water), and then add another layer. Water that layer, and continue with water-soaked layers of Bentonite until the hole is filled up.

The Bentonite absorbs the water, expands, and holds the ground rod very tightly in the center. Because of the expansion and Bentonite's conductive qualities, a lower resistance path to ground is achieved. It's sort of like using an eight-inch diameter ground rod at your site. The Bentonite never dries out, as it is "hydrophilic" and absorbs moisture from the soil to remain hydrated.

If you do a web search on the term "bentonite" you'll come up with a lot more information about this mineral. Besides improving ground systems, it is used as a colloidal (suspension) product for everything from vinyl plastics to chocolate(!) to cosmetics. Also, Bentonite, in a highly refined form, is the key active ingredient in disposable baby diapers (I'm not kidding!). I know this trivia because Bentonite mining is one of the industries in the region of Wyoming where my wife's family resides.

It is also to be used as protective shock absorber for nuclear waste, dumped deep inside Sweden's rocky ground.

[hcdx editor]

Here in Bonney Lake, WA, our soil is very rocky, ancient glacial debris from Mt. Rainier. Even though we live on a small island and are surrounded by water, the soil is still very dry and rocky. Bentonite surrounding my ground rods has improved the directionality of my impedance-matched, terminated 175 ft. longwire. In my opinion there was an improvement in directivity to Papua New Guinea and Irian Jaya after improving the ground with Bentonite. I also use the same ground for K9AY electronics (the head unit), although I'm not positive this is really helping. It's worth a try, though, especially for poor soil.

There was a IEEE paper written some years ago about Bentonite grounds. The careful measurements and comparisons they did showed clearly that resistance-to-ground was lowered when Bentonite was used. This method is clearly preferred over adding various salts to the soil... Bentonite won't corrode the ground rod nor harm the soil or surrounding vegetation.

STEAMARAMA II

June 16 & 17 Ladysmith, WI

Steamarama II is a rail excursion out of Ladysmith. It will be its final run.

It will be on a first come first serve basis for tickets.

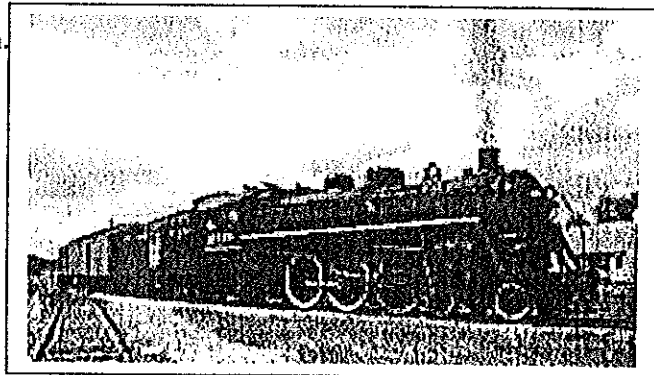
For all the information on this excursion you can get a brochure by writing or calling:

Greater Ladysmith Area Chamber of Commerce

(715) 532-6222, P.O. Box 2, Ladysmith, WI 54848

Rusk County Tourism

(715) 532-2257, 205 W. 9th St. S., Ladysmith, WI 54848



RELIEF FOR HAMS IN SIGHT

Amateurs gain reprieve from long-time clash with broadcasters from the Arizona State Union-Tribune, April 1, 2001

WASHINGTON, D.C.- Ask any Arizonan amateur radio operator what the most pressing problem on his frequencies is, and he will likely tell you it is the serious interference from shortwave broadcast stations in the 40 meter band that has grown progressively worse over the last two decades.

Yesterday, international broadcasters announced their intent to vacate the hams' frequencies in favor of another portion of the radio spectrum, bringing clear frequencies to hams for the first time in over forty-five years, the Bush administration reported.

Since the early- to mid-sixties, hams have had to endure increasing shortwave activity fueled by the Cold War, tensions between Cuba and the West, and the rise of governments in the Third World anxious to use radio to spread propaganda. Protected by international law, national broadcasters, religious programmers, and others have enjoyed virtually unlimited access to frequencies, cheap worldwide coverage, and operation at almost any power level they desired, creating an "elbow to elbow" situation for which no resolution was seen, given the squatters' stance taken by all parties involved.

Now, a major bloc of broadcasters has unilaterally proposed moving off of 40 meters onto a frequency band much less utilized now that it has been recently vacated by the military. The new band had been under the control of the United States Department of Defense since 1950, but has lied in fallow for years with the steady rise in the use of satellites for military communications. Broadcasters finalized an agreement with the Department to assume administration of the frequencies over the weekend.

The announcement came at a meeting of the International Federation of Shortwave Broadcasters (Fédération Internationale de Stations de Onde Courte) in Geneva in late January. Of the 75 member countries of the organization, 61 have operations in the 40 meter band, meaning that the move away from 40 meters will constitute a mass exodus of signals which have hampered amateur radio stations for years. Ham radio operators stand to gain the most from the surprise announcement, but millions of shortwave listeners-- hobbyists with special receivers that can pick up the shortwave stations-- are also rejoicing at the prospect of clearer frequencies and more enjoyable reception.

The vote in favor of the move was 72 to 2, the two lone dissenting votes coming from Cuba and Iraq. Libyan representatives abstained from the voting.

"When you talk about surprise in the context of world policy, you imply that something has been discussed for a long, long time with what seemed like no possible solution, and that the solution was not foreseen by anybody, anywhere, at any time in the next five years. This is definitely an astonishing surprise," declared Warren Kruger, a diplomat and regulatory commissioner with the State Department in Brussels who was involved in recent restructuring of shortwave allocations for the European Union. He said that prior to the announcement, the best scenario envisioned by US and European policymakers was the remote possibility of the question of 40 meter broadcast interference appearing on the agenda for the World Radiocommunication Conference (WRC) in 2003. "Even then, it was doubtful whether the issue would have made it past the committees onto the general floor. It just wasn't seen as pressing enough in the face of other, stickier matters," he said.

Under the proposed move, shortwave stations from the 61 nations would vacate the 7100-7300 kilohertz band between now and the end of 2006. The majority would move to a band between 7325 and 7490 kilohertz, with some others scattering to several frequencies above and below that band. According to Kruger, the major consideration was the acquisition of frequencies with characteristics similar to the 40 meter band in terms of range and time of day when the best reception was possible. Evidently, the new frequency band is satisfactory to the stations involved on all accounts.

Other officials blindsided by the shotgun announcement were from both the Federal Communications Commission (FCC) and the national association for amateur radio in the US, the American Radio Relay League (ARRL).

Continued on next page....

Continued from previous page...

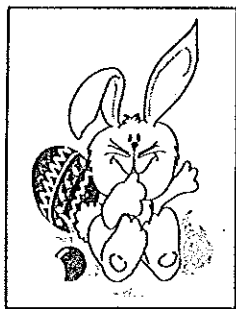
LaVonne Burke, head of the FCC field office near Quantico, Virginia, expressed shock and confusion over the Geneva statement. "We didn't even have representatives there, thinking that there wouldn't be any significant movement coming out of Geneva. All of our attention was fixed on 2003, frankly." In Newington, Connecticut, an ARRL spokesman struck a skeptical tone. "We need to be very cautious in our response to this unilateral agreement," he said. "What effect will it really have? Does it leave us more or less susceptible to other actions aimed at reducing our frequency allocations? All these questions remain unanswered and our vigilance cannot diminish at this time just because a group of broadcasters decide to up and move off a frequency."

Hailing the agreement as "monumental, a gift from heaven," well-known Arizona ham Clyde "Skip" Butler declared the dawn of a 21st century era for ham radio. "We never thought we would see this day. It is the answer to our dreams and I can't tell you how exciting and how promising this is to us. It's like being told you've just won the lottery." Another Flagstaff-area amateur who identified himself as "John L.", explained what this meant to him. "My buddies and I have met on 40 meters every night for the last eighteen years, and every single one of those nights, it has been a struggle to find a clear spot to set up our transmitters. If it wasn't the howling of Radio Moscow, it was the splatter from one of those darned religious stations that completely wiped out the band. We've hoped for years that the ARRL could somehow kick them out and give us some relief. Man, I can't tell you how nice it will be without having to worry about [the broadcasters] anymore. I can't wait."

Amazingly, not all amateurs are welcoming the less-cluttered future of 40 meters with open arms. In Ohio, a demonstration is planned at the Dayton ham convention in May, the largest in the country. Organized by a group of ham traditionalists, the demonstration will take the form of an 80-vehicle-long caravan which will parade through the city carrying signs and placards and protesting on a number of ham frequencies as they progress. An unidentified member of the protest stated, "Generations of hams have literally grown up with having to dodge interference on 40. It made us better operators, having to use operating savvy to survive in between Radio Moscow and Voice of Free China. This makes us look like wimps who have to be pandered to and who can't stand a little bit of rough going. Our mission is to fight for ham ingenuity and for the reputation of hams everywhere."

Other amateurs reserved their excitement for other reasons. In phone conversations with this reporter, several hams expressed concern that the elevation of amateur radio to exclusive use of the 40 meter band could endanger their hold on other, nearby frequencies that are being eyed by a number of other services who have a new-found, increased appetite for spectrum space for Internet and communication services. They said also that new hams entering the hobby through a streamlined FCC licensing process that has been generally viewed as easier and less demanding would not appreciate their frequency privileges without the added challenge of having to confront shortwave interference.

Within the next five years, whether it is good or bad for the hobby, it will undoubtedly be easier and more pleasant to tune the 40 meter band and converse with other radio aficionados. While some will enjoy the arrangement, others will bemoan the loss of yet another ham tradition. Whatever the outcome, hams will be left to craft a response to the sudden and very unexpected windfall.



FIST POEM

by Don Quinn W9OVK

CQ CQ

OH, WHERE ARE YOU?

CAN U HEAR ME CALLING

FROM OUT OF THE BLUE?

WHEN EVER I SEE A FALLING STAR,

AT TIMES, I THINK THAT'S WHERE YOU ARE.

REFLECTING, REFRACTING,

ALL OVER THE PLACE

ARE YOU REAL OR JUST A PRETTY FACE?

IF I BOUNCED A SIGNAL, OFF THE MOON

WOULD YOU COME BACK TO ME, REAL SOON?

CQ CQ

COME BACK TO ME

(BECAUSE) TO TALK CW IS SO HEAVENLY!

QST de WIAW

Propagation Forecast Bulletin 15 ARLP015

From Tad Cook, K7VVV

Seattle, WA April 6, 2001

To all radio amateurs

SB PROP ARL ARLP015

ARLP015 Propagation de K7VVV

This has been another week of remarkable solar activity, with Sunspot 9393 producing more excitement. Sunspot numbers peaked on March 28 and 30 at 352 and 349, and solar flux on March 27 and 28 at 273.4 and 273.5. Total visible sunspot area peaked on March 29 at 3940 millionths of the solar hemisphere. This week solar flares tossed out enough energy to overwhelm the equipment that measures 10.7 cm solar flux.

At 2300z on April 2 the flux reading was 563.1, and on April 5 the readings were 582.5 and 398.7 at 1700 and 2000z. These flare-enhanced readings would certainly be a new record far beyond any daily values reported for this solar cycle, but they are discarded because they don't reflect actual 10.7 cm energy. So for April 5, instead of a daily reading of 398.7, NOAA reported 210, probably a guess based upon declining daily readings and a more accurate 2300z reading of 207.5.

Following the new high in sunspot numbers, we have seen a number of large solar flares and resulting aurora. On April 2 the most powerful flare in at least 25 years erupted. Fortunately most of it was aimed away from earth. A few days earlier on March 31 the planetary A index soared to 155 and the planetary K index went as high as 9 during a severe geomagnetic storm. There were incredible auroral displays, seen as far south as Mexico. See an amazing gallery of aurora images, many from southern regions that very rarely see aurora, at http://spaceweather.com/aurora/gallery_31mar01.html.

Since March and the first quarter of the year are both over, it is time to report some numbers for those periods. Average solar flux for March was 177.7. This is an increase, as the average daily solar flux for December through February was 173.6, 166.6 and 147.2. Average daily sunspot numbers for March were 166.7, and for December through February were 146, 143 and 131. Quarterly average solar flux for last year was 180.5, 182.9, 188.3 and 173.3.

For the first quarter of this year the average solar flux was 164.4. The average daily sunspot number for the quarter just ended was 147.3, and the quarterly sunspot averages for last year were 168.9, 190.8, 193.1 and 145. Although this quarter really ended with quite a bang, the quarterly averages for both solar flux and sunspots were lower than the same period a year earlier.

Although the really active regions have now rotated off of the visible solar disk, there are more rotating into view. Predicted solar flux for the next few days, Friday through Monday, is 210, 210, 205 and 205. The predicted planetary A index for those days is 15, 8, 8 and 10.

Someone passed along some interesting comments that Paul Harden, NA5N posted on Thursday to a discussion group for low power amateur radio. He noted that there seemed to be an HF blackout below 20 MHz caused by ionizing radiation reaching the D layer. E and F layer enhancement of the ionosphere is good for HF propagation, but D layer enhancement tends to absorb radio waves. He recommends the NOAA Space Weather Now site at <http://www.sec.noaa.gov/SWN/>, then clicking on D-region absorption to go to http://www.sec.noaa.gov/rt_plots/dregion.html.

For some time now W6EL's MiniProp program for propagation prediction has been unavailable. This is the program used to generate the occasional path predictions shown in this bulletin. I am extremely happy to report that W6EL has just released a new free version of his software, this time for Windows, and you can get it at <http://www.qsl.net/w6elprop/>. It works with all recent versions of Windows, including 95, 98, ME, NT and 2000. Be sure to give this a try, and send W6EL a note of thanks. It is a great piece of software for looking at seasonal, time of day, frequency and solar activity variables and their effects on HF communications.

In closing, there was just too much to report this week, but thanks to everyone who wrote. I should also note that DL9KAC mentioned in last week's Propagation Forecast Bulletin ARLP014 is actually DL6KAC.

Sunspot numbers for March 29 through April 4 were 315, 349, 326, 320, 223, 228 and 217 with a mean of 282.6. 10.7 cm flux was 261.7, 256.8, 245.6, 257.5, 228, 223.1 and 204.8, with a mean of 239.6, and estimated planetary A indices were 22, 10, 155, 30, 20, 5 and 15 with a mean of 36.7.



**INCREDIBLE SAVINGS
ON
BAKERY PRODUCTS**



Always a wide variety of frozen & fresh tasty bakery.
Cakes, doughnuts, sweet rolls, pies, cookies & more...

OPEN M-F 8 a.m.- 6 p.m. Sat 8 a.m.- 4 p.m. Closed Sun

3300 W. College Ave., Appleton Phone 739-7063

WE WELCOME FOOD STAMPS

TPO INTERNET

(920)991-2599

DSL -- Broadband Internet
ISDN and Dial-up v.90
Web Hosting and Media Streaming

N9RJZ@w9zl.ampr.org
N9SGG@w9zl.ampr.org

146.655 Mhz Repeater 107.2PL

Autopatch Procedure

For More Information Contact:

Press (Phone) # + *) To Dial

Key/Mic To Talk,

Release To Listen,

When the Call is Complete..

Press (73*) To Hang-up

Mark Heimmernan - KF9CS

749-9024

or

Jeff Schmelchel - KB9BYP

731-7338



Resources, LTD.

Helping Amateurs, Help Others

TOWER ELECTRONICS

THE HAMS DIME STORE & WHOLESALE TO THE WORLD



ORDERS
TECH INFO
FAX LINE

1-800-662-3422
920-435-3359
920-435-2980



SCOTT KB9AMM & JILL KB9PZF E-MAIL KB9AMM@JUNO.COM
P.O. BOX 12631 GREEN BAY, WI 54307-2631
PRODUCTS FOR HAMS FROM HAMS SINCE 1978

**If you would like to see
your ad on this page.
Please contact any of the
club board members to
find out how.**

**If you would like to see
your ad on this page.
Please contact any of the
club board members to
find out how.**

Sonnenberg Radio and TV Service

Free estimates for repair of:
Computer Monitors
Radios and TV's
VCR's
All work guaranteed

AN OFFER TO LICENSED HAMMS!

*I have a large garage filled with electronic parts. If
I have what you need, it just might be yours for
free!
Call me.*

Richard Sonnenberg 675 East Edgewood Dr.
Appleton WI 54913 W9UVZ@tpo.org

920-733-0609

Help Support Our Advertisers

**QSO'er
FCARC-W9ZL
P.O. Box 5233
Appleton, WI 54912-5233**

FOX CITIES AMATEUR RADIO CLUB

NAME _____ DATE _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE _____ CALL SIGN _____ CLASS _____

Membership dues for one Year:

Full - \$15.00 Associate - \$15.00 Student - \$10.00 Retired - \$10.00

Mail to: FCARC P.O. Box 5233 Appleton, WI 54912-5233