



FOX CITIES AMATEUR RADIO CLUB, INC.

QSO'ER



P.O. Box 2346 Appleton, Wisconsin 54912

www.fcarc.us

CQ CQ CQ

Volume 23, Issue 6  
June 2010 Issue

2009 "Ham of the Year" John Touzinsky K9KI

Congratulations to the elected candidates!

Vice President is Brian Long KB9LRD

Treasurer is Frank Livermore N9LT

Members at Large are:

Rich Kelly N9AQ

Mike Smith N9IAT

Neil Touzinsky KC9MLD

We are just getting started with summer so hang on and mark your calendars for some of these up coming events:

June 19th VE Testing at the Red Cross building on Wisconsin Ave in Appleton. Time for an upgrade?

June 19th is also Kids Day so get a youth started in radio and support the kids out there on this special day.

June 26th and 27th is Field Day 2010. We will be at The Grange on BB and 76 again this year so bring a dish to pass and come on out and get on the air.

July 4th is Community Fest in Neenah. This is an all day event broken down into shifts shorter than most of our events and it all ends with a bang. Literally!

July 28th to Aug 1st is EAA Air Venture 2010. We will be running a Special Event Station on the EAA grounds. Sign up on the website.

Let's not forget the next club meeting Monday June 21st at the UW Fox Valley campus 7pm sharp. Hope to see you there and at many of these great events..... K9KI

**FCARC Officers**

- *President— Tony Mach (AB9IO)*
- *Vice-President— Brian Long (KB9LRD)*
- *Treasurer—Frank Livermore (N9LT)*
- *Secretary— John Touzinsky (K9KI)*
- *Membership Co-ord—Dan Vanevenhoven (N9LVS)*
- *Technical Director—Andy Palm (N1KSN)*
- **Members At Large—**
- *Rich Kelly (N9AQ)*
- *Mike Smith (N9IAT)*
- *Neil Touzinsky (KC9MLD)*

**Inside this issue:**

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Check out the FCARC **2 Meter Net** Wednesday nights at 8 pm on 146.760 Repeater

**Fox Cities Amateur Radio Club, Inc.  
General Membership Meeting  
Agenda for April 19<sup>th</sup>, 2010**

**Board of Directors FCARC**

President: Tony AB9IO; Vice-President: Dave ND9DW; Treasurer: Karen KC9BMH  
Secretary: John K9KI; Membership Coordinator: Dan N9LVS; Technical Director: Andy N1KSN  
Members at Large: Mike N9IAT, Frank N9LT, Rick W9RIC

“John Touzinsky K9KI is our 2009 “Ham of the Year””

**Presiding Official:** Dave Sprangers, ND9DW

**Call to Order and Opening Remarks:** Vice President, Dave Sprangers, ND9DW

**Quorum count:** Vice President, Dave Sprangers ND9DW

**Introductions / Roll Call**

**Welcome to Our New and Renewed Members!**

**N9BPO, KF9JA, K9OSH, W9SBY**

**Old Business:**

- A.) MS Walk wrap-up – ND9DW
- B.) Soleburner wrap-up – KB9LRD

**Discussion: Old Business**

**New Business:**

- A.) The Repeater Committee will be presenting a Technical Director nominee for the Board’s approval in June – W9RIC
- B.) FCARC Field Day 2010 is June 26<sup>th</sup> & 27<sup>th</sup> – updates and announcements – N9LT
- C.) The board has approved the purchase of a permanent dual-band antenna for EAA (Not to exceed \$75) – ND9DW
- D.) May is election month – Positions up for vote include Vice President, Treasurer, and Members at Large – Nominations are open and will be closing before today’s vote – ND9DW
- E.) Voting will now commence – ND9DW
- F.) An elections chairperson and committee of non-nominated members will count the votes and present the results

**Discussion: New Business**

**Additional Committee/Coordinator Reports:**

Treasurer’s Report – KC9BMH  
EAA Airventure 2010 – AB9AH

**Hal Report:**

Simple Mixing – N1KSN

**Show and Tell:**

None

**Announcements: JDRF – May 15<sup>th</sup>, 2010. Field Day – June 26<sup>th</sup> & 27<sup>th</sup>, 2010. Communityfest – July 4<sup>th</sup>, 2010. EAA Airventure July 26<sup>th</sup> – August 1<sup>st</sup>, 2010.**

**Adjourn:** (Accepting a motion to adjourn) (2nd) (V: M)

## • Membership Renewal Reminders

As a reminder only—following is a list of the membership renewals coming up this month and the following few months. **If you have already renewed—thank you.** If not, you can renew with Karen (KC9BMH) at the next club meeting. All membership renewals will be going to a January renewal date over the next year.

4/1/2010	K7LT
4/1/2010	KC9FSH
5/1/2010	WSOC
5/1/2010	KC9DEF
5/1/2010	N9TNW
6/1/2010	KC9IPU
6/1/2010	KI4MFL
6/1/2010	K9RW
7/1/2010	W9RCK
7/1/2010	KK0I
7/1/2010	N9LVS
7/1/2010	KC9DMM
7/1/2010	K6JDF
7/1/2010	W9APL
7/1/2010	N9AI

### Elmer's Contact List

This is a listing of HAMS who are willing to help other HAMS out in special areas. Feel free to contact these fellow HAMS with any questions:

Call / Name	Specialty Area	Phone #
N1KSN— Andy	CW	720-0617
N9OEQ— Chuck	HF & VHF Digital Modes	788-5497
N9TNW—Bill	HF & Satellite	739-6827
N9LVS—Dan	FCC Personal Data Changes	205-4899

*Do you have something to sell?*  
*Contact the Newsletter Team to get it listed here!*

#### From the website:

2 Meter amplifier \$50 AB9TE  
Used 10' section Rohn 25G \$50 KK0I  
Kenwood TS570DG W/ extras \$800 KK0I  
Alpha 76A KW/Dentron 3000 Ant Tuner \$500 W9SBY  
Drake Twins TR4XC, R4C, AC4, & MS4 \$500 W9SBY

For more information, see the website

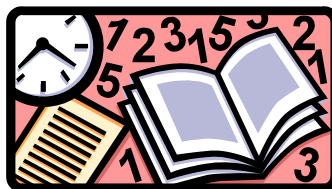
Have something Ham related to sell? If so, contact the [Newsletter Team](#) via our website to arrange for it's insertion in the next issue of this newsletter. We will run it in the newsletter and on-line at [www.fcarc.us](http://www.fcarc.us)

## •Upcoming Events

# VE Testing Dates

Interested in Amateur (HAM) Radio? Need to upgrade your license? The FCARC can help you with both of these.

With the exception of the November test date, all testing is done at the Red Cross Building at 1302 E. Wisconsin Ave. in Appleton. Test check in is from 8:00 am until 8:30 am. The cost is \$15.00.



Here are the tentative dates for 2010:

June 19th

August 14th

November at the Ham Fest

## •Upcoming Events

- |               |  |
|---------------|--|
| June 19       | VE Testing Appleton Red Cross Bldg on Wisconsin Ave  |
| June 21       | General Membership Meeting   |
| June 26-27    | Field Day 2010! Come on out. Operate and have some fun. Coordinator is Frank N9LT                                    |
| July 4        | Community Fest at Riverside Park in Neenah. Operators needed. Contact the coordinator Tim KC9FSH                     |
| July 19       | General Membership Meeting   |
| July 28-Aug 1 | Special Event Station on the grounds at EAA Air Venture 2010. Coordinator is Jon AB9AH. Sign up on the club website. |

### Meeting information & location

We meet at [UW-Fox Valley](#)  
1478 Midway Road  
Menasha, WI 54952.  
Room 1346  
Meetings start at 7:00 PM every third Monday of the month.

### Wednesday 2 Meter Net Net Control Operator schedule

June 16	N9AQ
June 23	KC9MLD
June 30	KG8RF

**New Schedules Coming**  
If you are interested in net control Contact Eric KG8RF for the 2 meter net and Mike N9IAT for the 6 meter net to sign up!

### Thursday 6 Meter Net

Day: **Thursday**  
Time: **8:00 pm**  
Frequency: **52.570 FM**

If you would like to be a net control please contact Mike N9IAT

**Join me in welcoming the following new members and thank the renewing members**

**KC9EYA, KC9IZF, K9OSH, N9BPD, W9SBY, KF9JA**

## Articles You May Have Missed on the Website

From 5/1/10

### EAA Special Event

"The Fox Cities Amateur Radio Club, W9ZL will once again operate a Special Event station from the grounds of the EAA Air Venture 2010. We will operate 5 days – Wednesday through Sunday, during the last week of July. This operating event is open to all license classes. We will operate 2 HF stations, one on 20m and one on 40m, plus local communications on 2-meters. The club call, W9ZL, will be used throughout the event.



We are looking for both “am” and “pm” operators covering each of the 5 days. You can sign up for one shift or more if you so desire. The event is open to all of the amateur community. If operators sign up for a 4 hour shift, they will be given a daily wristband that will allow them to go and wonder around the Fly-in.

For further information and to sign up to operate the event go to:

<http://fcarc.us/ea/ea.htm> or contact Jon Oldenburg AB9AH @ AB9AH@arrl.net, or (920)832-9727 Thanks' Jon Oldenburg AB9AH Special Event Coordinator EAA Air Venture 2010

--

Jon Oldenburg AB9AH

"A bicycle can't stand on it's own because it is two tired..."

From 5/18/10

### Elections Author : K9KI

Congratulations to the following election winners:

Your new Vice President is Brian Long KB9LRD,

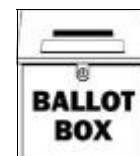
Your new Treasurer is Frank Livermore N9LT,

And your new Members at Large are:

Rich Kelly N9AQ,

Mike Smith N9IAT,

Neil Touzinsky KC9MLD



Thank you to everyone who ran and everyone who voted.

Along with our current members at large, we would especially like to thank Dave Sprangers ND9DW and Karen McDonald KC9BMH for their multiple terms of service in office with the club.

Again, congratulate the new board members when you can and thank the previous members for their contributions.

K9KI

### Other Links you should have in your favorites:

ARRL <http://www.arrl.org/> and of course the WI section <http://www.arrl.org/sections/WI.html>

QRZ <http://www.qrz.com/>

FCARC club website <http://www.fcarc.us>

# FOX CITIES AMATEUR RADIO CLUB W9ZL, INC

## Membership Application Form

Check one:

- New Membership**                       **Renewal** (for existing members)

DATE \_\_\_\_\_

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE \_\_\_\_\_ CALL SIGN \_\_\_\_\_

LICENSE CLASS \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

ARRL Member     Yes     No

**Membership dues for one year:**

\*Full - \$15.00 \*Associate (non ham) \$15.00 \*Student - \$10.00 \*Retired - \$10.00

\*\*Family – Member dues plus \$5.00 each additional family member residing at the same address

\* A prerequisite to the family membership \*\*see by-law's Article IV section1

Please make checks payable to **FCARC**  
Mail to: **FCARC P.O. Box 2346 Appleton, WI 54912**

**Admissions Use:**

ID# \_\_\_\_\_

- Database     List server-newsletter     List server-email     Website renewal corner  
 Website member     Agenda     Newsletter editor

## Visit to the W0AII farm

If you set your GPS for N 44 43.070, W 91 20.009, you will find yourself at a place called "The Farm," as it is referred to by W0AIIH regulars. Located on 120 acres of rolling farmland in West Central Wisconsin, about 4 miles south of Fall Creek, or about 10 miles southwest of Eau Claire, it is commonly referred to as the middle of nowhere. Most hams that have driven on I-94 south of Eau Claire have seen the endless array of towers that can be seen on the hills overlooking the interstate at about mile marker 76."The Farm" is the home of Paul and Mary Bittner and the ultimate HF contesting station. Paul (W0AIIH) has been a ham for many years. I had spoken with to Paul a few times before going over to see the Farm. He is always working on his shacks. When we drove up, we found Paul working on one of his tractors. Paul quickly explained that there is always plenty to do on this piece of land. Most of the towers on site are towers that broadcasters either set for scrap or abandoned. Paul told me a story of following a truck some 150 miles. He noticed some heavy duty rigging equipment on the trailer, and the truck had West Virginia tags, but it was going north. Well, he figured it would have to stop soon, so he followed them. When they did stop he asked the guys where they were heading. They told him they were taking down a TV broadcast tower, the new one was complete and the old tower was bare and needed to come down. Paul asked the guys what they were going to do with it. They replied, "It's going to be scrapped." So, Paul asked, "What kind of price are you getting on it," and the guy told him. Paul offered him a bit more and told him he would only need to bring it to Eau Claire. They accepted his offer. That's how one tower found a new home. Most of the towers have found their way to the Farm in the same manner. The buildings came from various locations, too. Most of the phone poles came from poles being taken down and replaced with newer poles. Most of the feed line and coaxial cable have been recycled on the Farm. Paul has several piles of tower sections, antennas, cables and miscellaneous metals. Most of the mounting brackets are made right in the machine shop on the site from used metal parts. Paul has a lot of dies for brackets that he makes himself.



The main building is commonly referred to as the Chalet. (See photo 3 - it's the blue building on the right side of the photo) Currently, the Chalet houses five of the six HF operating positions. This is the south wall of the Chalet, on the picture on the right the right side of that picture is the 15M spotting station, to the right is the 15M operating station. The 15M station usually runs an IC-765 to an Alpha 87A. On the left picture on the right is another view of the 15M operating station to the right is the 40M operating station. The 40M station uses an Icom IC-775 driving a homebrew 4-1000A amplifier. The black and orange knobs on the right side of the picture are to change antennas. This is one of Paul's custom items as no one makes a 10-position antenna switch that can handle high power.

This is the north wall with the 80M and 10 M stations on it. The 10M station is on the right. The 10M station usually runs an IC-775 or IC-765 to an Alpha 86 or a homebrew 4-1000A amplifier and the 80M station is on the left. On the 80M station they usually run an FT-1000D driving a homebrew 4-1000A amplifier. The headsets at the station are all Heil headsets. Heil headsets are great for audio isolation for between stations. This station is truly built for contesting and radios come first.

This is the 160M position and Paul's favorite band. This is on the west side of the Chalet. The 160M station runs an FT-1000D to a homebrew 4-1000A amplifier. The main antenna for 160M is a full-sized 1/4 wave elevated feed vertical. The tower is 18" face Pirod with base insulator at 60 feet. There are 24 elevated radials. Also notice the tubes on the top of the desk; these are backups for the big amplifier.





The picture to the right shows the big homebrew 4-1000A amplifier rack; there are three amplifiers and a power supply all in this rack. This is an all custom amplifier. This is set up in such a way that you can run all three amplifiers at one time without interference from the other stations. Paul commented it makes a great space heater in the winter. The Chalet was a building originally used to house a broadcast station transmitter at a different antenna site. Of all the operating points on this site the Chalet is by far the largest of them at about 20 ft. x 15 ft., but with very few creature comforts. The feed lines coming into and out of this building are almost inconceivable. The Chalet is the main operating building.

The 20 meter position is located about 300 feet away in a small 6 x 8 building known as the "Air Force Shack," because in a previous life it was a portable Air Force communications shelter. Here you will find both the 20 meter position and the 20 meter spotter. The main operation point is in the center with the spotter station to the right. The 20M operating position uses a FT-1000D into an Alpha 86A amplifier. In the case of a single-op or multi-single contest, most of the 20 meter antennas can be rerouted to the main building. As can be seen in the pictures, there is enough feed line running between the two buildings to reroute almost anything. This is also true of the rotor controls. The main building can be rearranged so all the operating controls are located on one side. The 15 meter and 40 meter positions are mostly used for this. This place is setup for serious contesters. But at the (residence) house there are 7 single size cots to sleep on. That's it for the Contest station area but we have not finished our tour of the Farm yet. Get your drool rag out - the tower and antenna list will be at the end of this article. There is so much more to see. Paul also has a VHF and UHF station, Work Shops and a metal shop.



Here are some of the tower highlights:



Full sized 1/4 wave elevated feed vertical. Tower is 18" face Pirod with base insulator at 60 feet. There are 24 elevated radials.



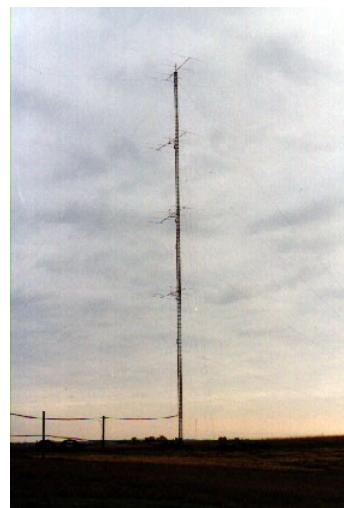
One of the primary 80 meter antennas is a switchable 4 element vertical beam, switchable NE NW SE SW, it consists of a center feed point and 4 parasitic elements that can be electrical changed to become



3/3 Hygain 403B Long John's at 180/90 feet. They have 46' booms and full-size 73' elements. Each Element is half is comprised of 10 sections of tubing, the elements have so little sag they look more like a 20 meter beam. The rotating ring on the 190 foot tower was featured on the cover of CQ magazine. Above the top yagi is a 3 ele Cushcraft 10 m, pointed 90 degrees from the 40 meter antenna.



This spot is looking straight up the 20 meter rotating tower. 4/4/4/4 Hygain 204BA's the rotatable towers Paul uses a trim motor from a B27 to rotate the tower.



4/4/4 modified/extended HyGain 155BA' for 15 meters on a 180 foot tower. Tower is 18" face Wind-charger. Each ant is independently steerable.



There are also several 10M Antennas but I never did get a good picture of those. To finish out this article, I thought I would show you the main workshop this is actually the only part of the station that is in the house. The parts and equipment here would rival most Amateur Radio repair facilities. With this much gear it's more economical to fix it on site, and during a contest you can't wait to send things out to get them fixed. There is also a machine shop next to the main building that any machinist would be proud of.



I would like to thank Paul (W0AIH) and Mary (WB0PXM) Bittner for their hospitality. I learned so much from them and my notes on the day run over. It was the most fun a ham could have on a single day. We never even had a chance to operate any of the stations, but that's OK because I have been invited back to operate during a contest. That chapter is yet to be written

Dan Vanevenhoven N9LVS

**Towers**

Num	Name/Primary Use	Ant	Height	Type	Face
1	Strum 40 m	3/3 ele Hygain 40m 180/90	200	Guyed	
	54				
		6 ele 10m @ 90 200feet			
2	Vesto 40 m	3 ele 40m 70 feet	70	SS	Taper
		4 ele 40m			
3	FVF Mem	TH5 60 ft	60	SS	
4					
5	10 m	6 ele 10m Telrex at 53 ft	50	Guyed	
6	20 m	4 ele Telrex 20m	70 feet		
7	20 m	6 ele Telrex 20	160	Guyed	
		4/4/4/4 6m			
		2m ??			
8	20 m	4/4/4/4 Hygain 204BA 20 m	180	Guyed/Rotate	
	3/3/3/3 10 m				
		8 ele 6m			
9	20 m	5 ele Telrex 20m 105feet 110	Guyed		
		4/4 Hygain 20m Phased SE			
10	15m	5 ele Telrex 36ftb 15m	200	Guyed	
		4/4/4/4 6m Fixed SE			
		5/5 Hygain 26ftb 15m 110/70 feet			
		4 ele cushcraft 15m			
11	15m	4//4/4/4 15m Hygain	200	Guyed	
12	10m	5/5/5/5 Hygain 10m	200	Guyed/Rotate	
		3 ele 20m 80feet			
13	15/20	5/5 Telrex 15m 30'b 175/140ft	200	Guyed/	
	Rotate				
		6 ele Telrex 20m 46' Feet			
14	160	1/4 Elevated Feed 24 elev radial	200		
	Guyed				
15	80M vertical beam phased array				
16	80M vertical beam phased array				
17	80M vertical beam phased array				
18	80M vertical beam phased array				

**Ant List**

- 160  
 1/4 elevated feet, feedpoint at 60 feet, with 24 elevated radials  
 2 Double Extended Zepps at 170 feet (shared with 80)  
 3 ele wire beam to SE, in valley  
 Full-wave Loop SE/NW  
 1/4 Wave sloper  
 11 1040 foot beverages.
- 80  
 NE SW Bobtail Curtain (two 3 ele arrays)  
 NW SE Bobtail Curtain (two 3 ele arrays)  
 4 element vertical beam (Switchable to NE NW SE SW)  
 2 double ext Zepp's at 170 (shared with 160)  
 Bi-Square, 2 wave loop with open opposite the feed  
 4 520 foot beverages (multiple directions)  
 Shared 160 beverages
- 40  
 3/3 ele Hygain 403B Long John's at 180/90 feet (Strum) (twr 1)  
 3 ele Telrex on 46' boom ant at 80 feet on windmill tower (vesto)  
 (twr 2)
- 20  
 6 ele Telrex on 36 foot boom @ 160 feet (twr 7)  
 4/4/4/4 element Hygain 204BA on 180 foot rotating tower (twr 8)  
 5 ele Telrex 20m 105 feet (twr 9)  
 4/4 Fixed SE at 70/35 feet (twr 9)  
 6 element Telrex on 46 foot boom (twr 13)  
 2 4 wave Rhombic at 80 feet pointed 37 and 217 deg
- 4 ele twr 6 this is near trailers, move this summer  
 3 element @ 80 feet (twr 12) this is on the 10m rot tower
- 15  
 4/4/4/4 ele mod/ext HyGain 155BA on 200 foot rotating tower  
 (tower 11)  
 5/5 element Telrex on 30 foot boom on rotating tower twr 13 (new tower)  
 5/5 Hygain 155BA on 26 ft boom 110/70 feet (twr 10)  
 5 ele Telrex at 185 (twr 10)  
 4 ele Telrex at 45 (twr)  
 3 ele at 40 (Pole)  
 Tribanders  
 Dual bander
- 10  
 6 ele Telrex at 53 feet (twr 5)  
 3/3/3/3 HyGain 103BA 200 foot rotating tower (20m tower) (twr 8)  
 5 ele Telrex at 200 feet 90 deg from 40 meter ant (twr 1)  
 5/5/5/5 Hygain 105BA on 180 foot rotating tower (twr 12)  
 3 ele Telrex at 45 feet  
 4 ele Cushcraft at 75' (twr 10)  
 2 Tribanders