



FOX CITIES AMATEUR RADIO CLUB, INC.

QSO'ER



P.O. Box 2346 Appleton, Wisconsin 54912

www.fcarc.us

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Volume 21, Issue 11
Nov 2008 issue

Hamfest Prize Winners!

Congratulations to the following winners of the FCARC Hamfest prizes!

SX-600 SWR & Power Meter:
Dave Baldrige N9BMS

FT-60R Dualband HT:
Damian Schumacher N5FVM

FT-7800R Dualband Mobile:
Mike Wild KB9DED



FCARC Officers

- *President— Frank Livermore (N9LT)*
- *Vice-President— Dave Sprangers (ND9DW)*
- *Treasurer—Karen McDonald (KC9BMH)*
- *Secretary— Mike Smith (N9IAT)*
- *Membership Co-ord—Dan Vanevenhoven (N9LVS)*
- *Technical Director—Andy Palm (N1KSN)*
- **Members At Large—**
- *John Touzinsky (K9KI)*
- *Tom Riederer (N9UY)*
- *Tony Mach (AB9IO)*

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Check out the FCARC **6 Meter Net** Thursday nights at 8 pm on 52.570 FM

Fox Cities Amateur Radio Club, Inc.

General Membership Meeting

Agenda for October 20th, 2008

Board of Directors FCARC

President: Frank N9LT; Vice-President: Dave ND9DW; Treasurer: Karen KC9BMH
 Secretary: Mike N9IAT; Membership Coordinator: Dan Vanevenhoven; Technical Director: Andy N1KSN
 Members at Large: Tony AB9IO, Tom N9UY, John K9KI

“Dave Sprangers ND9DW is our 2007 “Ham of the Year””

Presiding: President, Frank Livermore N9LT

Quorum count: Vice President; Dave Sprangers ND9DW

Call to Order: 7: 00 PM

Introduction of Members, Roll Call!

New Members: N/A

Renewed Members: Roger Palmer KC9MDZ, Charles Kehler KB9CVR, Frank Livermore N9LT

Old Business:

Club ID Badges Laminator and supplies – K9KI

B.) Door County MS Challenge Report – N9LT

New Business:

A.) Approval by the Board of Tim KC9FSH as Coordinator for St. Joe’s Run/Walk (Nov. 1st)

B.) Motion 10132008-1 Passes: To expend up to \$100 for the purchase of supplies for making club badges

C.) Motion 10132008-2 Passes: To donate \$20 to WAR for coordination

D.) Board Discussion – 2009 Meeting Locations

E.) Board Discussion – 2009 Amateur Radio Classes

F.)

Committee/Coordinator Reports:

JOTA Coordinator – K9KI (Oct. 18th)

Hamfest Chair – AB9IO

Repeater Chair – W9RIC (Echolink deployment update for 443.650, N9LT)

St. Joe’s Coordinator – KC9FSH

Hal Report: Basic Foxhunting Equipment - N1KSN

Announcements: St. Joe’s Run/Walk November 1st, Hamfest November 2nd, VE Testing November 2nd (Hamfest)

Raffle Winner

Adjourn: (Accepting a motion to adjourn) [WA8HBE](#) (2nd) [N9LVS](#) (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.

10/1/2008 KB9QXJ
 10/1/2008 AB8PM
 10/1/2008 KC9DEE
 10/1/2008 W9OVK
 10/1/2008 WB9OJD
 10/1/2008 KC9FSH
 10/1/2008 KB9ENO
 11/1/2008 NQ9F
 11/1/2008 KC9IZF
 11/1/2008 N9QLP
 11/1/2008 KB9BYP
 11/1/2008 AB9AH
 11/1/2008 KB9AIT
 11/1/2008 W9OP
 11/1/2008 W9RIC
 11/1/2008 W9UVZ
 11/1/2008 KB9WAF
 11/1/2008 KC9MLD
 11/1/2008 KF9S
 11/1/2008 W9HAN
 11/1/2008 N9LDA
 11/1/2008 WJ9K
 11/1/2008 WB9QFX
 11/1/2008 K9GAD
 11/1/2008 K9KI
 11/1/2008 KC9HRD
 11/1/2008 K9WWW
 12/1/2008 KB0KFX
 12/1/2008 KC9STS
 12/1/2008 KB0DKD
 12/1/2008 K0TIW
 1/1/2009 ND0L
 1/1/2009 KB9LRD
 1/1/2009 N9UY
 1/1/2009 WA0ITP
 1/1/2009 K9RFI
 1/1/2009 KC9BMH

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
W9ZC— Bob	Tech. Code	725-7974
N9OEQ— Chuck	HF & VHF Digital Modes	788-5497
N9TNW—Bill	HF & Satellite	739-6827
N9LVS—Dan	FCC Personal Data Changes	205-4899

Items for sale!!

2 meter/440 trunk mt. antenna - \$20

Alinco DR-435T 440 mobile - \$200

Seller info: Al - N9QLP

Email: emkays@peoplepc.com

Phone: 920-426-1851

MFJ Pocket CW Reader - MFJ-461 \$40.00

SignalLink SL-1 (PSK31 interface) \$35.00

Seller info: Dave ND9DW

Email: dsprangers@gmail.com

Phone: 920-757-5245

Have something Ham related to sell? If so, contact Mike (N9IAT) at mike@n9iat.com 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

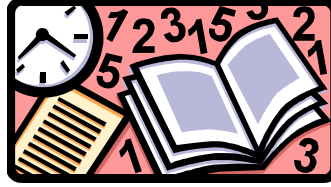
•Upcoming Events

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 \$14.00.

Here are the dates for 2008:



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 Frank N9LT

Wednesday 2 Meter Net Net Control Operator schedule

Nov 12 KC9MLD

Nov 19 N9LT

Nov 26 ND9DW

•Upcoming Events

Nov 17, 2008 General Membership Meeting

Fox Cities Amateur Radio Club (W9ZL) invites everyone to tune in on Wednesday evenings at 8:00 PM on 146.76/R 100hz PL
Check into the Wednesday night net. This is an open forum net and anything can be discussed, including; technical questions, equipment review and for swap and for sale items.

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

John Marker WA8HBE, Ken Winters KC9DEE, Andy Lawton KC9LWD, Justin Kusheidt KC9HYC, Jeff Schmeichel KB9BYP, David Wahl KB9WAF, Allen Sens N9QLP, Dan Bayer WB9QFX, Leonard Brumbaugh K6JDF, Harry Hartmauh N9GDY, Bob Bain N9LDA, Bill Neimuth KB9ENO, Gary Hoehne KB9AIT, Richard Roth K9GAD, Steven Collins KF9S

A Review of the Icom 2820H Dual-Band D-Star Mobile with GPS

By: Frank Livermore, N9LT



Overview and Specs

The 2820H is dual-band, dual-receive, with independent controls for each “side” of the radio. The radio can display frequency and memory name simultaneously on each side and be put into single band mode easily – displaying huge text size. The supplied microphone (HM-133) provides nearly all primary controls for the radio. A total of 522 memories are available and can be organized into 26 memory “banks” labeled A-Z. High power output is 50W - even on 70cm. The radio is capable of cross-

banding but only in analog modes.

Cosmetics and Mechanics

The obvious feature noticed by anyone who sees a 2820H is the screen size – boasting nearly 4” wide and about 1 1/2” in height. Backlighting is menu-controlled with not only brightness and contrast adjustments but color as well! Colors include green, amber, and red with a number of adjustments in between. The display, when mounted on the radio, is taller than the main unit. Two pairs of pegs allow for placing the display flush to the top of the main unit or slightly above the main unit. A small separation cable connects the two units together in this configuration.

For mobile installations the IC-2820H includes a 3.4M cable. Oddly the package doesn't include a microphone cable of any comparable length. However, after quick study of the wiring diagram I figured out that the mic cable could simply be extended using a straight-thru CAT 5 and a coupler with no rewiring needed. A couple of zip ties make the connection secure (use shielded cable for this).

Icom recommends using a mounting base made for this radio (MB-65) for mobile installations to ensure a solid install. I went a different route – using the provided metal plate and “sticking” the magnetic display head to it (yes, the head unit is very magnetic). It is stated in the manual that the magnets should only be used to connect the display to the main unit directly. Since I occasionally get paranoid about theft I preferred to magnetically mount this display so I can unplug it and pull it off in less time than it takes to write this sentence explaining the procedure. The proper way to install a radio would be to mount things in a manner that would reduce their movement in an accident.

Controls and Usability

Controlling the IC-2820H will be easy for anyone experienced with V/V, V/U, U/U type of radios. There are squelch and volume knobs for each side of the radio plus a pair of large “Main” knobs for VFO control or Memory Channel (when in memory mode) tuning. These knobs also act as buttons that when pushed will make that “side” the main, or operating, VFO. This allows active use of that VFO such as transmitting, changing frequency, and any other operating parameter. These large knobs are also used for menu scrolling when choosing options in the radio. There are duplicate buttons for each “side” for V/Mhz, Scan, M/Call, and MW. The M/Call allows the user to toggle between Memory, Call, and Weather Channels quickly.

Scanning and frequency navigation are very good. One nit-pick I have with the radio is that it won't skip a frequency I'm monitoring while scanning the same memory bank. In other words, I often times load up the same memory bank for N.E. Wisconsin in the left and right sides of the rig. I'll

monitor a repeater with activity on the left side and scan on the right. The radio will always stop on the active repeater even though I'm already monitoring it on the left side of the radio. The audio level increases and the scanning stops on the right side of the radio until the scan resume conditions are met in the radio's configuration.

The large screen typically provides a great view of all operating parameters – no squinting. Not all is rosy here though. This large screen can produce a significant amount of glare. This happens infrequently but is an inconvenience when it does. Most dual band radios will give you a frequency display or memory name. This radio's display is large enough to show both at the same time – and for each side of the radio! It is a great feature and more appreciated than I could have imagined. In addition to this you can choose which to display larger; in other words do you want the frequency or the memory name to be larger on the display? This coupled with a large display, backlight color choices, brightness and contrast controls makes a very personal setup likely to please most anyone. Another option for those with poor eyesight would be to operate the radio in "single mode". This will display HUGE text on screen.

Transmit audio from the radio has been described as "tinny" to very good but lacking bass. Built-in speaker audio is superb. I installed an external speaker and have far more audio than I need – great for noisy environments. The 2820H also has the ability to utilize two speakers, one for each "side" of the rig. Each output can be independently controlled for volume and squelch in either single speaker or dual speaker configurations. Either or both "sides" can be muted using microphone controls.

D-Star with GPS

Digital voice and data capabilities are provided with the optional UT-123 module that easily installs into the radio. This module not only allows for D-Star voice and data but integrates GPS functionality and has the interface for connecting the supplied GPS receiver¹. Extended lists of options in the radio's menu magically appear following the installation of this module. Additional options also appear in the optional programming software (CS-2820) following the installation. The radio also offers diversity reception for those seeking top-notch digital performance (requires a second antenna).

The UT-123 allows for callsign display of the transmitting stations, text messaging, and distance/bearing to the transmitting station or repeater². It also allows for the display of a compass, altimeter, and distance to any POI's (points of interest) you programmed into it. An alarm can be sounded when you get close to your POI. Your position and callsign is sent at the beginning of every transmission (transparently to the user)³. Messages can be input manually, via a laptop, or a set of preset messages can be quickly called up for departure over the radio. If that wasn't enough, the radio can record 30 seconds of voice into as many as three messages. These "voice clips" can be selected for auto-reply should someone call and you are unavailable.

Conclusion

This radio offers anything today's amateur might want in a VHF/UHF mobile unit. It is a solid performer with benefits for new and old hams alike. The downside, as with nearly any D-Star radio, is in the price tag. You will easily sink \$1,000 into this radio if you opt for the D-Star module. None of that cost includes programming software, cables, or any other accessories! In the end I would give this radio 9 out of 10 stars for its flexibility and overall performance.

1 – The GPS receiver is not weather-proof or water resistant. It must be placed inside the vehicle

2 – Both stations must have D-Star with GPS enabled equipment (DPRS)

3 – This data is called the header. Requires amplifiers that are capable of fast TR switching

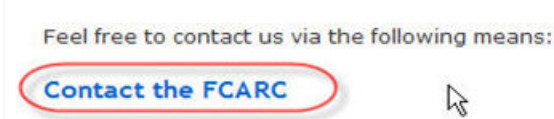
FCARC ID badges

The FCARC will be making ID badges for new club members, members with new call signs or if your ID badge is worn out. You can request a ID badge from the FCARC website. www.fcarc.us

Click on “Contact The FCARC”



Click on “Contact the FCARC”



Fill in your Name and Email address
 Choose “Yes” for I need a club ID badge
 Click on “Submit”

Contact the FCARC	
Your name *	<input type="text" value="David Sprangers"/>
Email *	<input type="text" value="dsprangers@gmail.com"/>
I need help with the Hamfest *	<input type="radio"/> YES <input checked="" type="radio"/> NO
I need help with JOTA *	<input type="radio"/> YES <input checked="" type="radio"/> NO
I need help with Field Day *	<input type="radio"/> YES <input checked="" type="radio"/> NO
I need help with the EAA Special Event Station *	<input type="radio"/> YES <input checked="" type="radio"/> NO
I need help with a membership application *	<input type="radio"/> YES <input checked="" type="radio"/> NO
I need help with WQ5OP *	<input type="radio"/> YES <input checked="" type="radio"/> NO
I need a club ID badge	<input checked="" type="radio"/> Yes <input type="radio"/> No
Comments	<input type="text"/>
<input type="button" value="Submit"/>	

* Required