

# XARC 2001



# Newsletter of the Xerox Amateur Radio Club

President Vice-President Secretary Treasurer Repeater Trustee Station Trustee Brian Donovan Bill Kurrasch Bob Karz Fred Donahue John Wright Barry Rickett K2AS K2WEK K2OID W3MUD KE2MK N2EZS

**XARC** Repeater

KE2MK 145.29 MHz Output 144.69 MHz Input

XARC Web Page: http://www.ggw.org/xarc/



May 2001

### Next club meeting:

**NOTICE: Date Change** 

### Wednesday, May 23, bldg 337 6PM

Agenda: Mark Hoffman, K2AXX, Chairman Rochester VHF Group, and Jim Howard, N2JMH, will give a presentation on VHF Contesting.

### From RARA web page:

"Myself and N2JMH (Jim Howard) will be teaming up to talk about VHF, VHF Contesting and ROVING! Jim is our famous rover, who travels around with a 30' tower on top of his van, with 300w on 2 meters! He's got some interesting stories to tell."

Mark and Jim are active members of the Rochester VHF Group. RVHFG is the hotbed of amateur VHF, UHF and microwave expertise in Rochester. One of the most popular activities is the ARRL's VHF Sweepstakes in late January. This is the grand daddy

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# Major Upgrade to W2XRX



At the April club meeting, the club decided to make a major purchase. After a couple of years of on and off discussion, the club members decided to acquire a new all-mode HF/VHF rig, the Icom IC-746. A committee consisting of Fred Donahue W3MUD, Rick LaDonna N2IJI, Larry Lavery WW2J, and Bob Karz K2OID will determine what vendor, accessories, etc and work the actual details. If all goes well, I would expect the rig to be here before the May meeting.

It is always difficult to spend money, especially when its not yours. This is a decision that the club did not take lightly, we spent a couple of years mulling over it. Our treasury will still have a substantial balance, more than we traditionally have had on average over the last 15 years.

Some of the benefits are: A new radio is a way to generate interest in operating W2XRX; 6 and 2 meter operation built in; DSP technology; tuner built-in; Kenwood TS-440 available as loaner; VHF Contesting easier at W2XRX.

We'll send a note out when it arrives and maybe set up a special time to demo it. See page 5 for rig specs.

### Club Station HF Rig History

- 1981 Club purchases a Heathkit HW-101 with monies earned manning a hotdog stand at XRA Softball tournament. Club member Dan Thomas KJ2E does the assembly
- Approx. 1990 West Coast Xerox Amateur Radio donates Kenwood TS-130 to help maintain east coast/west coast communications link in emergencies
- 1997 Club purchases used Kenwood TS-440, sells TS-130
- 2001 Club purchases new Icom IC-746

### Annual XARC Fox Hunt

The Annual XARC is scheduled to take place on May 5 (Rain Date May 12). Fred, WO2P, and Judy, N2KXS, are the Huntmasters this year and will likely have something tricky up their sleeves. Let's hope it doesn't include moonbounce. Details will be announced on the DL and hopefully our web page.

# Support XARC - Time to Send in Dues

If you haven't sent in your XARC dues for the year 2001, now is a good time to do it. It's only \$5 for the remainder of the year. It will keep you on the mailing list. If you lost the application form, there is one at the end of this newsletter or on our web page.

# 2001 Testing Schedule

The exam schedule for 2001 is as follows:

June 6 September 5 December 5

This year the exam fee is \$10.00 Be sure to have some form of picture ID and if possible, the correct fee. I can't break too many \$20 bills!

All sessions will be in Bldg 337 and start promptly at 7 PM

73, Lou Kohnen K2ANC Ikohnen@crt.xerox.com Xerox 422-3899 Home 249-5009

## License Classes

Contact Bob Karz if you are interested in taking a class.

# Field Day

Field Day is coming up and XARC is planning another effort. The June club meeting will include final strategies and plans.

# Help

We will try to continue this newsletter for six or so times a year, but we could use some help. If you have a new piece of equipment and can jot down your impressions or are involved in a homebrew project or collect ham radio related items, write something up. We will put it here and share it with the members.

### CALENDAR OF EVENTS

**XARC ANNUAL FOX HUNT** 

PLACE: CHASE-PITKIN PARKING LOT HOLT RD WEBSTER

TIME: SATURDAY MAY 5 AT 9:00 AM

RAIN DATE: MAY 12

MAY CLUB MEETING

PLACE: XRA BLDG 337 CONFERENCE ROOM TIME: WEDNESDAY MAY 23 AT 6:00PM

Our regular monthly meeting. VHF Contesting by K2AXX

and N2JMH

ARRL JUNE VHF CONTEST

WHEN: JUNE 9 - 11

http://www.arrl.org/contests/announcements/rules-06vhf.html

JUNE CLUB MEETING

WHEN: JUNE 21 6PM BLDG. 337

FIELD DAY

WHEN: JUNE 23-24

# Member Spotlight Bill Kurrasch K2WEK



Bill began at Xerox in 1969 and in currently working in the Product Safety group. After being a SWL enthusiast since age 14 and verifying 175 countries, he got his Tech license last June and upgraded to General last September. Since then he has contacted 35 countries on the ham bands. Interests include all modes of communication from DC to light.

When not involved in QSO or SWL activities, Bill enjoys repairing and restoring old hollow-state receivers. He has numerous Consoles, Chairsides, Tomb Stone, a Cathedral and table model radios, mostly Philco and Zenith brands.

Bill has been an active weather spotter in the National Weather Service (NWS) Sky Warn program since 1978 reporting to the Rochester office and more recently to the Buffalo office when these offices combined operations. This helped to spur his interest in ham radio and to become licensed as the Sky Warn program has been growing and relying more on amateur operator reports in addition to telephone reports.

During the Summer months, Bill enjoys working on and showing his 1959 and 1978 Thunderbird's along with his two Fiero's and a Grand Prix. When taking a break from the dials during the winter he might brew up a batch of homebrew. (Liquid type, not electronic!)

In addition to XARC, Bill is also a member of the ARRL, RRRA and AWA.

Station details:

Icom IC-746 (100 watts, barefoot)

Icom IC T81A (handheld)

Kenwood R5000 (receiver only)

MFJ 1798 Multiband Vertical

Alpha Delta DX-Sloper (SWL only)

Several long wires (usually get knocked down during the winter storms)

QSO/QSL Techniques that work for me:

Persistence. Don't give up! They can probably here you on the other end. The pile ups can make it pretty tough but if you try long and hard enough, eventually you will make it through.

If a band is "dead" move on to another one. There is always an opening somewhere in the spectrum.

Sending a QSL quickly and directly seems to work pretty well for me. On some of the poorer countries a\$ or two and maybe a picture postcard may help.

I am working toward the WAS award. One way that I easily increased my count last Fall was to participate in the NWS Special Event. There were over 80 stations working from most states and most of them responded quickly with their QSL cards. It was an easy way to contact about 35 states. The next "Special Event" is scheduled for next December.

Memorable radio experiences:

Of course, your first contact is always one of your most memorable experiences. But contacts have been somewhat limited so far, being recently licensed. Some of my memorable SWL experiences include listening to the Russian invasion of Czechoslovakia in 1968. Radio Prague announced that they didn't know how much longer they would be able to maintain broadcasting. Shortly after that the left the air for about two weeks. The fall of the German Democratic Republic was also interesting to listen to. I was a "member" of the Radio Berlin International SWL Club and had sent a letter of to them along with several reception reports. They chose to read my letter at the end of their last transmission is English. Dessert Storm was also very interest to listen to via KOL Israel and other middle east stations. Live reports with air raid sirens blaring in the background became routine operation during that event.



of VHF contesting that brings insanity to VHF contest enthusiast. The Rochester, NY area is one of the most radioactive hot spots during this period radiating RF energy from 50 Mhz to light. Those of us conveniently operating on FM are clearly aware that much more is happening on the VHF bands. We hear the rover contacts in FN 2,3,12,13,14,22,23 grid squares. We also hear QSY arrangements planned for 50MHz, 220, 440, 900, 1.5 Gig frequencies. The familiar question arises. Who are those guys?

Here is you chance to find out. Our speakers, Mark and Jim are two of those "wild and crazy guys". They will be addressing our curiosity about this high-energy activity with pictures and stories about the VHF+ bands.

Mark will focus on the VHF bands, their characteristics and uniqueness as he steps from 50 Mhz to light. He will address what we can expect from VHF+ operation... things like, propagation, band-by-band comparisons of distance & activity. Mark will cover some typical equipment you'd find at hamfests that can get you on the weak-signal segments. What is VHF contesting like, outside the FM only categories?

Jim will focus on roving with description of equipment, preparations and stories of operating in the corners of those remote grid squares. How do you get 6-8 VHF+ bands operational in a van? Can you really operate them all from Watertown, Syracuse, Wellsville and Leroy in one wintry weekend? Anyone who has tried to operate multibands from just the Leroy Grid Square can relate to the special consideration of this insane accomplishment.

Thanks to RARA for talk description

### **Club Station Committee**

We put out an announcement for volunteers to form a Club Station committee. This would bring together a group to help keep the club station fully operational and organized. Presently, the rotor requires service, the 6m beam is damaged, and we will be installing a vertical on 337. In addition, a new rig is coming. The hard drive in the club PC may be on the way out, so options for upgrades should be considered. The usual housekeeping, QSLing, and equipment checkout is ongoing.

This won't be a time consuming task. We just want to organize antenna work and the station equipment.

So far, here are the people who have volunteered to be part of the committee:

John Randall

- Larry Lavery
- Brian Donovan
- Ned Asam
- Lou Pepin
- George Keiser

We also have some volunteers who have offered to help out with antennas, Warren Boudrie, Tony Werdein, and Rick LaDonna.

If you are interested in helping out, let us know.

Brian.Donovan@usa.xerox.com

# For Sale

- Rohn 32' freestanding tower
- Ham IV rotor and controller (I am pretty sure it is a ham IV)
- Mosley TA33 WARC yagi (20,17,15,12,10) 4 elements
- Cushcraft 6M yagi (3 element on short boom)
- 2 M2 2m yagis (11 elements each)
- ~ 14'x 2" aluminum mast

Everything works and is in good shape. I am doing this from memory at work so if you want more specifics I can get all the detail at home.

I would like to sell the whole lot for ~\$500 FOB my house (which means you have to come and get it, but I will help with the take-down).

Please let me know if you are interested, or pass the info on to others who may be.

thanks Harry KF2TV 347-9355 work X79355 671-0586 home

### ICOM IC-746

WOW! 100 watts on HF, 6 meters AND 2 meters! IF-DSP, too! Click on the small image to get a large picture of the IC-746. A REAL HF radio with 6 and 2 meters. With solar cycle 23 gearing up, all hams will be able to take advantage of better HF propagation conditions, night AND day!

### HF + 6 meter + 2 meter Coverage

The IC-746 offers all mode operation (SSB, CW, RTTY, AM and FM) on the amateur HF bands, 50 MHz and 144 MHz bands. In addition, a wide frequency coverage receiver provides continuous coverage from 30 KHz to 60 MHz and 108-174 MHz.

### 100 W Output for All Bands

100 Watts of output is available on all bands - HF, 50 MHz and 144 MHz, making the IC-746 a practical choice for all-around base station use. The die-cast aluminum chassis and a large cooling fan help to stabilize the PA circuit, providing 100% full duty cycle operation.

#### **DSP Function Standard**

DSP digitally transposes receive audio components in all modes of operation to produce desired AF frequency characteristics at the IF stage of the transceiver. This built-in DSP provides the following functions:

- Noise reduction
- Automatic notch filter
- Selectable APF

### Large, Multi-Function LCD

Designed for ease of use and optimum readability in any lighting condition. Operating frequency, memory channel number, function settings and digital meter readouts are indicated. In addition, the following items can be displayed in the multi-function dot-matrix portion of the LCD:

- Band scope provides a convenient visual indication of band conditions around a displayed frequency
- Memory names up to 9 characters can be conveniently assigned to memories
- Key assignments indicates functions assigned to multi-function switches
- Twin PBT settings display passband widths and passband location against the RX frequency
- Split frequency RX or TX frequency is displayed during split operation
- Memory keyer content displays the contents of the CW memory keyer

### Twin PBT (Pass Band Tuning)

This convenient function narrows the IF passband in two stages to eliminate interfering signals. Particularly useful during crowded band conditions such as pileups, contests, etc.

### **Versatile Filter Combinations**

Up to 3 optional crystal filters can be installed, providing a wide variety of filter combinations. Choose a filter combination from the front panel that best suits your operating needs, for example 500 Hz and 250 Hz CW filters.

### Digital, Multi-Function S/RF Meter

This meter provides a variety of useful information. Signal strength is indicated while receiving (S-meter) and RF output, SWR and ALC levels are simultaneously indicated while transmitting. A peak level hold function is available for the S-meter.

#### **Complete CW Functions**

CW enthusiasts won't be disappointed. With a built-in 4 channel memory keyer with 50 characters, multi-function

electronic keyer, CW pitch control and full break0in (QSK), the IC-746 has it all.

### **Automatic Antenna Tuner**

An automatic antenna tuner id built-in and covers the HF bands to 50 MHz. After operating on a band for the first time memories can be preset providing very high speed tuning.

### **Specifications:**

- Dimensions: 11.3 (W) x 4.7 (H) x 12.5 (D); 19 lb, 10 oz
- HF + 6 Meters + 2 Meters
- All Mode, Including RTTY (FSK and AFSK) and PSK31
- 5-100 Variable Watts of Power (5-40 W on AM) on All Bands, Including 2 Meters
- Fast, Built-In Automatic Antenna Tuner for HF and 6 Meters
- 3 Antenna Connectors
- IF-DSP with Noise Reduction
- IF-DSP Auto Notch Filter
- Selectable DSP Audio Peak Filter (320/160/80 Hz)
- Noise Blanker
- Concentrated Information Dot Matrix LCD Display with Soft Key Controls
- Spectrum Scope
- Quadruple Conversion Superheterodyne for SSB, CW, AM, RTTY, Triple for FM
- Twin Passband Tuning (PBT)
- Triple Band Stacking Register
- 2 Step Preamplifier -- great for weak signal work on VHF. Single stage on 2 meters
- 10 "Memo Pad" Memories. Easy, powerful feature, great for contesters and DX'ers
- Noise Blanker
- 3 Optional Filter Slots -- 2 for 9 MHz and 1 for 455kHz, front panel selectable
- With the 4 filters that come as standard equipment, get up to a total of 7 filters
- Speech Compressor
- Tone Squelch Standard
- Tone Scan
- VOX
- SmarTuneTM Tuning. Automatically senses how fast you want to tune by how fast the knob is turned
- Digital Metering, Measures 3 parameters, all at once
- Auto Repeater Duplex Setting for 2, 6, and 10 Meters
- Quick Split Function
- CW Pitch Control
- Semi and Full Break-In (QSK)
- Memory Keyer with 4 Built-In Memories
- Includes QSO serial number generator with countup feature (incrementing the QSO number with each contact) and auto-repeat message
- Optional <u>CT-17</u> level converter for PC programming
- FM Narrow Capability
- Transmit Audio Monitor
- Durable, Continuous Duty Cycle Transmitter
- Built-In Carrying Handle and Side Feet
- Optional Voice Synthesizer