



THE LED

APRIL 1, 2008

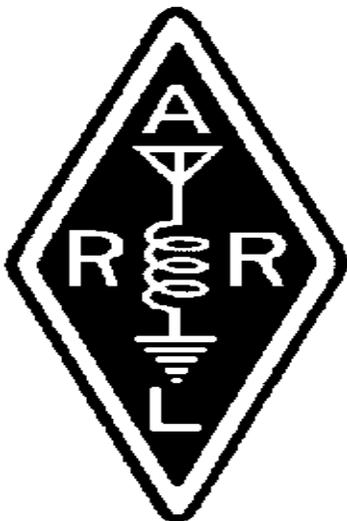
**Livingston Amateur
Radio Klub
PO Box 283
Howell, Michigan
48844**

www.w8lrk.org

NET 146.680
SUNDAY 9PM

CLUB CALL IS: W8LRK

NEXT KLUB MEETING
APRIL 10th 7:30PM at the
EOC, Highlander Way, Howell, MI



BOARD MEMBERS

President Van N8GVD
Vice-President Dick W8KDR
Secretary Mary KC8SER
Treasurer Clairus KC8QQN
Program Director Jon KC8VAB
Tech Coordinator Jim WB8AZP
Board Member Chuck W8CLK

COMMITTEE CHAIRPERSON'S

Repeater Trustee Jim WB8AZP
LED Editor Neil K8IT
VE Coordinador W5YI Jim WB8AZP
VE Coordinador ARRL Van N8GVD
PIO Officer Brandon KC8YHE
PIO Officer Jim N8ENX
Webmaster Les W8MSP

The Livingston Amateur Radio Klub maintains the 146.680 (Negative Offset, 162.2 CTCSS) and also the 444.525 (Positive Offset, 100.0 CTCSS) repeaters in Livingston County.

Please feel free to use them with good Amateur Operating Practices and don't forget to attend our meetings!

PREZ SAYS

Congratulations to Gerald McChristy, AB8JQ for winning the ICOM 7000. I would like to thank everyone that purchased tickets, it turned out well not only for Gerald but also for the Klub.



Operation Care is right around the corner and with a little help from everyone, no one should have to sacrifice their entire weekend. With that in mind, the sign up list is being circulated and please sign up early.

This month's program will be a collection of morse code keys. Greg WB8LXG will be our speaker. Greg who makes custom paddles is also bringing a collection for display.

April 15 is the NWS Skywarn Class, 7pm at Brighton Area FD, Sta 32, Old US-23 and Hyne RD.

Elections will be at the May Meeting, this year up for election will be:

- Vice President
- Treasurer
- Technical Coordinator
- Director/ Member At Large

With the hard work from your tech team and Kenny N4KCD the Livingston County D-STAR repeaters are on the air at a temporary location, come D-STAR with us. (2M) 145.320 (70cm) 444.0375

Our ability of providing Emergency Communications to served agencies is a very important part of the spirit of Amateur Radio. I want to thank those that have stepped up taken the required courses and training and participated in the exercises. But of course we can do better and waiting until we are needed isn't the time to decide you want to help. I would encourage all Radio Amateurs to become more involved in ARES and RACES take the required classes and making time to participate in the exercises. Having the training is as important as having the ability to do the job. To learn more visit www.n8eoc.org, www.w8lrk.org click on the ARES RACES tab or contact our EC or any of the AEC'S. .

Looking forward to seeing you at the next Klub event. Van, N8GVD

LARK SOCIAL

LARK Dinner before the Meeting Check in on the 146.68 repeater.

LARK Saturday Morning Breakfast

Join us for Saturday morning breakfast, held on the first and third Saturdays of each month. Our current location is the Crossroads Grill, near the intersection of Oak Grove Road and M59 in Howell. (The restaurant is located near the south end of the Kroger plaza). This is a great opportunity to get together with hams that can't always make our regular Klub meetings, and for hams just passing through! All are welcome!

LARK Meeting Minutes 3-13-08

- Meeting called to order.
- Pledge allegiance.
- Introductions.
- Our speaker was Kuzuija Fuija (A professor at MSU-Genealogical Science). His talk was on wind of the storm. A very good talk.
- Sec. report as in Led.
- Tres. report as printed.
- Bruce notes the equipment came in. There are 2 more trailers being built. The district is looking for their own trailer. Skywarn training April 15, 2008.
- Jon has no report.
- Jim-trustee-repeater doing fine. VE passed 3 times.
- Dick had nothing to report.
- 50/50 was won by John Waters
- Pat made a motion to adjourn, Chuck seconded it. Motion passed and 8 opposed.
- The big winner of the radio was Gerald McChristy, AB8JQ

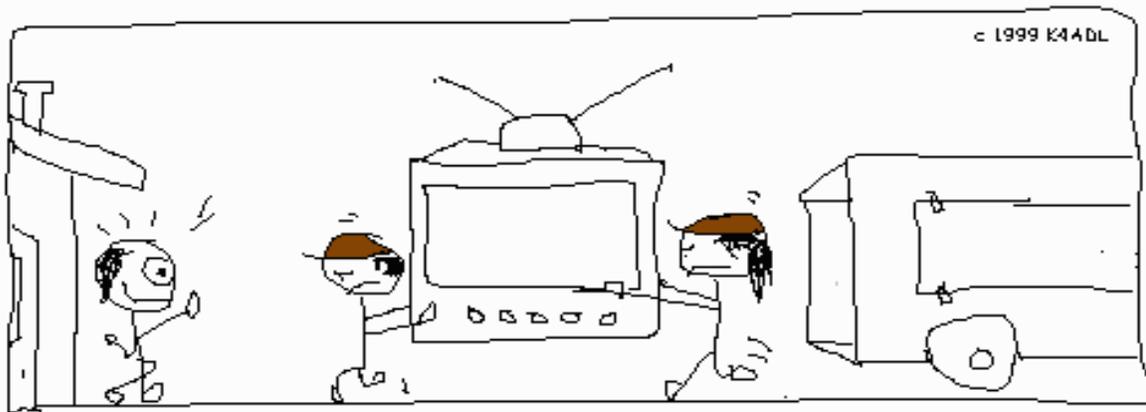
LARK BOARD Meeting Minutes 3-20-08

- Present were Van, Dick, Mary, Clairus, Chuck. Visitors were Neil, Pat and Gerald.
- Sec. report as in Led.
- Tres. as printed. \$3000 was made on raffle.
- Tech. Committee - They are catching up on small jobs.
- Chuck had nothing to report.
- Pat and Neil had nothing to offer.
- Mr. Fujita donated two books written by his father on tornados.
- Operation Care. Plans have started to come together. We are asking you to think of what shift you would like to work and sign up. Thank-you.
- Jim made motion to adjourn and Clairus seconded it. Motion passed. One opposed.

Respectfully, Mary KC8SER

APRIL 2008 SWAPS

Dates	Type	Event and Contact	Location
5 Apr 2008	+	ARGYL Hamfest Amateur Radio Group of Youth in Lowell http://www.argyl.org Talk-In: 146.620 (PL 94.8) & 145.270 (PL 94.8) Contact: Al Eckman, WW8WW 725 Bowes Road, Apt. K6 Lowell, MI 49331 Phone: 616-897-7659 Email: AEckman@lowell.k12.mi.us Lowell, MI Lowell High School 11700 Vergennes Street	Lowell, MI Lowell High School 11700 Vergennes Street Div: Great Lakes Sect: Michigan
12 Apr 2008	+	GMARC Trunk Swap General Motors Amateur Radio Club http://www.gmarc.org Talk-In: 443.075+ (PL 123) & 145.210- (PL123) Contact: Kurt Broman, WU8V 6733 Mayfair Road Shelby Township, MI 48317 Phone: 586-747-7535 Email: WU8V@arrl.net Utica, MI Trinity Lutheran Church 45160 Van Dyke Avenue	Utica, MI Trinity Lutheran Church 45160 Van Dyke Avenue Div: Great Lakes Sect: Michigan
19 Apr 2008	+	Milford Swap and Shop Milford Amateur Radio Club http://www.qsl.net/w8ydk Talk-In: 145.49 (PL 67); 146.52 backup Contact: Rose Moore, KC8NQJ 1383 Sylvan Drive Hartland, MI 48353 Phone: 810-632-5174 Highland, MI Milford High School 2380 Milford Road	Highland, MI Milford High School 2380 Milford Road Div: Great Lakes Sect: Michigan



UNAWARE THERE ARE 14 HAMS IN THE NEIGHBORHOOD OPERATING ON 6 METERS,
VICTOR TAKES DELIVERY OF A 60 INCH TV, COMPLETE WITH RABBIT EARS.

cartoon reproduced with permission from www.qsl.net/k4adl

No Electronics Magazines? Think Again.

Dan Romanchik, KB6NU
MI Affiliated Club Coordinator

Many old-time ham radio operators grew up with magazines such as Popular Electronics, Electronics Illustrated, and Radio-Electronics. Sadly, these magazines are gone now, but there are still electronics magazines out there that can help you keep up with what's going on in electronics. These magazines are written for practicing electronics engineers, so many of the articles will not be relevant to amateur radio or written in such a way to be nearly incomprehensible to electronics hobbyists, but you can't beat the price. They're free!

The magazines I'm referring to electronics engineering trade magazines. These magazines are sent out free to electronics engineers and others working in the industry, and are supported by the advertisers. You're not an electronics engineer? Don't worry. If you e-mail me, I'll tell you how you can qualify.

Let me give you an example of the good stuff you can find in these trade magazines. In the December 2007 issue of High Frequency Electronics (www.highfrequencyelectronics.com), there is an article titled, "Quartz Crystal Basics." Written by an engineer for a manufacturer of crystals, crystal oscillators, and crystal filters, this article describes how crystals are made and gives some tips on designing your own crystal oscillators.

Also in this issue is the article, "Power Combiners, Impedance Transformers, and Directional Couplers." This is the first of a series of articles to discuss these circuits. Amateurs frequently use transmission line impedance transformers (think baluns) to match an antenna system to the 50-ohm output of a transceiver.

The new products section includes items on RF parts and test equipment, as well as book reviews. You probably will not be purchasing the new Boonton 9103 7.5 GHz Portable Spectrum Analyzer (\$11,000 and up), but you might be interested in the book RF Circuit Design (\$41 at Amazon).

As you can see, there's plenty of useful and interesting information in these trade magazines. In addition to High Frequency Electronics, you may also want to check out:

- RF Design (www.rfdesign.com)
- Microwaves and RF (www.mwrf.com)
- EE Times (www.eetimes.com)
- EDN (www.edn.com)
- Test&Measurement World (www.tmworld.com, I used to write for this mag)

If you don't care to sign up for the print version of the magazine, you can always visit their websites and sign up for their e-mail newsletters. These newsletters will keep you informed of new articles and product information on the websites. You can then choose which ones you want to read.

When he's not trying to get free subscriptions to electronics magazines, Dan blogs about ham radio (www.kb6nu.com), teach others about ham radio, and is working to set up an amateur radio station at the Hands-On Museum (www.aahom.org) in Ann Arbor, MI. You can e-mail him at cwgeek@kb6nu.com.

MS150 – HELP NEEDED Act Now!

The dates have been set for this year's Mid-Michigan MS150 Bike tour, July 12 & 13. We are in need of operators to work the 2-day event. The MS150 event is the largest Amateur Radio public service event in South East Michigan. It requires a minimum of 75+ amateurs, to cover some 200+ miles of route, plus rest stops, and some 20+ mobile units each day. Each amateur that participates in the two day event supplies his or her own equipment, mainly consisting of a 25 Watt or greater VHF/UHF Mobile radio, Magnet Mount antenna, cigarette lighter socket Y adapter, and power cords. Food and lodging for Saturday night are provided for by the MS organization. The event starts promptly at 7 am Saturday and concludes late Sunday afternoon after the last rider arrives back. The Saturday night entertainment at MSU is a fun time for all.

If you are interested in participating or need any questions answered, please email Fred, W8FSM - fred@moses.bz. We currently have many open assignments for either Saturday, Sunday, and many 2 day assignments as well. To sign up for the event or get more information visit our website: <http://ms150.moses.bz>

73, Fred, W8FSM, MS-150, Amateur Radio Communications Manager (ARCM)

CONGRATULATIONS & 88's to KC8QQN & JERRY



Clairus Keep (KC8QQN) and Jerry Dunn were reunited in Holy matrimony on Monday March 24th 2008 in a small private ceremony with there Daughter and Granddaughter present. The ceremony took place in Portsmouth Virginia.

Michigan

Mount Hope Church

Gaylord Michigan
1672 M-32 East
Directions:
Jeff, WD8DX
989-390-1133

Special Event Station:

N8ES



**April 12th
10 AM
To
4 PM**

40 Meters:
7230 - 7250 USB
7100 - 7120 CW
80 Meters:
3900 - 3920 USB
3530 - 3550 CW

Civil Air Patrol

Communications
trailer &
Demonstration!

20 Meters:
14250 - 14300 USB
14100 - 14150 CW
10 Meters:
28400 - 28450 USB
28200 - 28250 CW

**Amateur
Television
Demonstrations!**

**Question and
Answer sessions,
Group discussions
on Youth Hams in
Michigan!**

**Radio
&
Multi Mode
Demonstrations!**

**For More Information Contact us at:
miyouthconference@yahoo.com
Talk in Frequency
147.12 Tone - 151.4**

2008 Michigan QSO Party

What? Michigan QSO Party

When? April 19th, 2008
16:00z (19th) to 04:00z (20th)

Where? 10 thru 80 Meters (CW & SSB)

Why? Just Have Some Fun!!!!

- Chance to get on the air
 - Single Op, Multi Op, Mobile, EOC
 - Be the station others want to work
 - Maybe activate a rare county?

- Excellent Club Activity
 - Reason to get together as group
 - New “EOC” station category
 - Excellent Training opportunity!
 - Get new members on the air!
 - Friendly Competition

Let's all help make Michigan “radio-active” on the 19th of April!!!!

Rules & More Info: <http://www.miqp.org/>

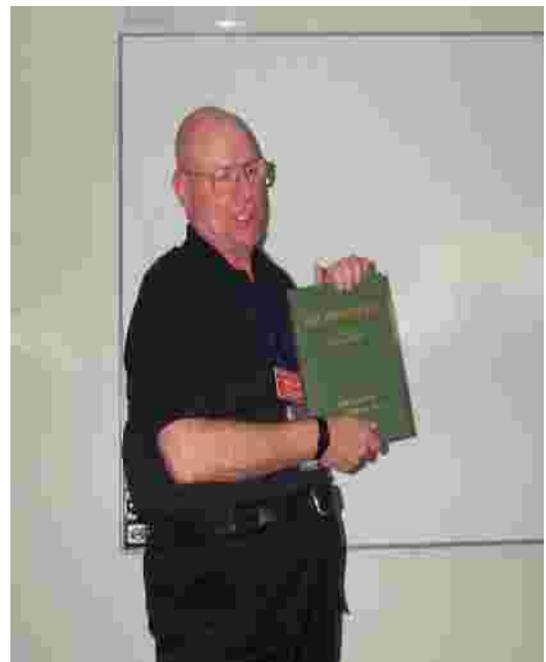
Sponsored By: ~~The Mad River Radio Club~~

LARK Meeting and Raffle

There was an outstanding turnout for the March 13th LARK Monthly meeting. The featured speaker was Kaz Fujita, Director of the Earth Science Program, Department of Geological Sciences at Michigan State University. Kaz delivered an overview of his father, Ted Fujita's life work studying tornados and his creation of the "F" scale for rating tornados. He talked of his father's many strokes of good luck that directed him to his findings. He also told of his studies on micro-bursts. Kaz donated two copies of his father's book outlining 70 years of tornado history in the U.S. to LARK.



Kaz Fujita receives certificate from Dick W8KDR



Dick W8KDR Shows donated books

IC-7000 Winner Gerald AB8JQ

The LARK Raffle drawing was held at the March 13th meeting and the winning ticket, drawn by guest speaker, Kaz Fujita, was held by Gerald McChristy AB8JQ.

Gerald was called by Klub President Van N8GVD. The call was put on speakerphone and the audience yelled out greetings to Gerald, who didn't really believe that his one ticket had won.

Gerald received his new Icom IC-7000, with remote mounting kit, at the March 20th LARK Board meeting.

Congratulation Gerald !



Klub President Van N8GVD delivers IC-7000 to Gerald AB8JQ

Word Usage

Lately there have been some changes in what is said on the repeater. Some change is good but some changes are not so good. It is not the large increase in the discussion about politics and the candidates in the upcoming presidential election that I am referring to. It is the use of a particular adjective.

This adjective is most often used to describe personal feelings about someone. Now, some of you would say this is not such a bad or foul word but others would find it **quite upsetting**. Some people get quietly **offended** by it's usage and this tends to **aggravate** them. The fact that anyone should be **irritated** by the use of an adjective should move fellow hams to the use of some other descriptive word and not **chafe** any listeners feelings. **Annoying** or **hurting** another operator's beliefs just to use a description does not sustain the highest operating skills us hams should be striving to maintain.

It would be better that we time out the repeater using a phrase or two such as "**get under ones skin**"; "**drive up a wall**" or "**it bugged him**" than use a foul word and have an **irked** listener whether ham or not. We have all heard that big changes usually started with small movements. The use of any offensive word should be avoided for this reason and then no one will have us "**getting on his or her nerves.**"

I hope you do not get **outraged** towards anyone about this article but take the offensive in the polite and educated use of the English language. Taking care of the little things now won't **hurt** as bad as trying to correct a problem once it is entrenched in usage. Lets all correct the problem now rather than have the plague that is heard on TV, the broadcast bands, satellite radio and other frequencies. Amateur Radio should be the leader in the proper and respectful use of communications. Refreshing our memories in the use of these few suggested adjectives and many others you can easily think of can not be as bad as learning the Morse code!

Thank You for your cooperation.

"A LARK member in good standing"



NEWS

Federal Communications Commission
445 12th Street, S.W.
Washington, D. C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>
TTY: 1-800-335-5322

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes a formal action.
See 47 C.F.R. § 1.12103 (D.C. Cir. 1974).

FOR IMMEDIATE RELEASE
March 28, 2008

FCC Amateur Digital VHF and UHF Order

Washington, DC – The Nation’s Amateur 2 meter and 70cm spectrum will transition from analog broadcast service to digital broadcast service on February 17, 2009. The Federal Communications Commission (the “Commission”) today released the Amateur Digital Education Order requiring amateur repeater owners to promote awareness of the nation’s transition to digital VHF and UHF broadcast. The educational efforts of these diverse groups are intended to provide clear and correct information about the VHF and UHF digital transition.

The VHF and UHF digital transition will provide amateurs with better quality voice and data as well as provide more repeater channel availability. It will also make valuable spectrum available to significantly improve public safety communications and will usher in a new era of advanced wireless services such as the widespread deployment of wireless broadband

The Commission has been committed to working with representatives from ARRL, amateur public interest groups, other governmental entities, and Congress to make the significant benefits of digital broadcasting available to the amateur community and minimize the potential burdens the transition could impose. Today’s order takes numerous steps designed to facilitate a smooth transition, including:

- Repeater trustees must provide on-air information to their users about the VHF and UHF digital transition, and have the flexibility to comply with one of three alternative sets of rules to best serve their widely divergent communities. Repeater trustees must report these efforts, on a quarterly basis, to the Commission and the ARRL.
- Manufacturers of VHF and UHF transmitters, receivers and related devices must provide notice to consumers of the transition’s impact on that equipment.
- FCC.gov partners and winners of the 147 MHz spectrum auction must provide the Commission with regular updates on their consumer education efforts.



NEWS

Federal Communications Commission
445 12th Street, S.W.
Washington, D. C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>
TTY: 1-800-835-5322

THIS IS AN UNOFFICIAL APPROVEMENT OF COMMUNICATION. RELEASE OF THE FULL TEXT OF A COMMISSION ORDER CONSTITUTES AN OFFICIAL ACTION.
See 47 CFR, FCC 3.15 F24.003 (D.C. CIR. 1974)

- FCC will assist the National Telecommunications and Information Agency (“NTIA”) in ensuring that retailers are fulfilling their commitment to the national
- VHF and UHF converter box program. This program will be similar to the program that is in place for the transition to DTV.

Action by the Commission February 19, 2008, by Report & Order (FCC 08-56). Chairman Martin issuing a statement; Commissioner Tate issuing a separate statement; Commissioner Copps concurring and issuing a separate statement; Commissioner McDowell approving in part, concurring in part and issuing a statement; and Commissioner Adelstein approving in part, dissenting in part and issuing a statement.

MB Docket No. 07-148

-FCC-

News about the Federal Communications Commission can also be found on the Commission’s web site www.fcc.gov.

EDITORS NOTE

I have been told that a thorough discussion of this FCC Report & Order will be held at the next Klub meeting. Please bring your thoughts on what to do with our analog 146.680 repeater and when we should convert it to digital so we can be in compliance with this amateur radio transition to digital.



LARK Coming Events



April 10 – LARK Monthly Meeting, 7 pm at the EOC, 300 South Highlander Way, Howell. The Program will be a collection of Morse Code Keys and custom paddles. Several different keys will be on display and live for you to try. Speaker is Greg WB8LZG who makes custom paddles.



SKYWARN TRAINING

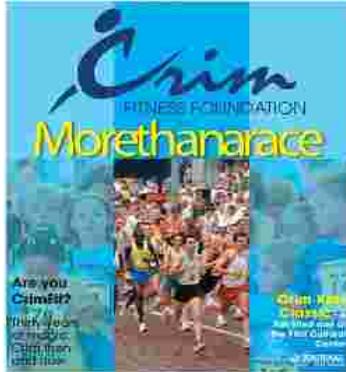
April 15, 2008, 7pm SKYWARN Class will be held at Brighton Area FD, Sta 32, Old US-23 and Hyne Rd.

Apr 19 – LARK Breakfast, 8 am at the Crossroads Grill M-59 at Michigan Ave/Oak Grove Road (west end of the Kroger Plaza in Howell).

May 3 – LARK Breakfast, 8 am at the Crossroads Grill M-59 at Michigan Ave/Oak Grove Road (west end of the Kroger Plaza in Howell).

May 8 – LARK Monthly Meeting, 7 pm at the EOC, 300 South Highlander Way, Howell. The Program will be a presentation on the use of ATV in support of the Crim Race in Flint each year.

There will be a live ATV station set up. Speaker will be Jerry Baker the (PIO) Public Information Officer of GCARES.



May 13 – VE Amateur License testing, 7 pm at the EOC, 300 South Highlander Way, Howell. Including W5YI FCC Amateur License, Code Proficiency and ARECC testing. Contact Jim WB8AZP at 810-220-2134 or e-mail wb8azp@arrl.net . Walk-ins are welcome.

May 17 – LARK Breakfast, 8 am at the Crossroads Grill M-59 at Michigan Ave/Oak Grove Road (west end of the Kroger Plaza in Howell).

June 7 - LARK Breakfast, 8 am at the Crossroads Grill M-59 at Michigan Ave/Oak Grove Road (west end of the Kroger Plaza in Howell).

June 10 – VE Amateur License testing, 7 pm at the EOC, 300 South Highlander Way, Howell. Including W5YI FCC Amateur License, Code Proficiency and ARECC testing. Contact Jim WB8AZP at 810-220-2134 or e-mail wb8azp@arrl.net . Walk-ins are welcome.

June 12 – LARK Monthly Meeting, 7 pm at the EOC, 300 South Highlander Way, Howell. The Program will be a presentation on basic first aid by KD8CCR

June 21 - LARK Breakfast, 8 am at the Crossroads Grill M-59 at Michigan Ave/Oak Grove Road (west end of the Kroger Plaza in Howell.

June 27-29 - BALLOON FESTIVAL WEEKEND – HELP NEEDED! (Contact: John Waters if you can help)

June 28-29 - FIELD DAY WEEKEND – BAND CAPTAINS NEEDED! (Editor's Note: Let's get competitive for a change!)

FOR SALE:

Like New

ICOM IC-2100H 2 meter mobile
W/ Mike, Manual, Pwr Cord, 1/2 wave Mag Mount antenna
\$150.00 or make a reasonable offer.

Fair condition

KENWOOD TH-77A 2 Meter/440 HT
w/3 batteries, 2 chargers, manual
\$120.00 or reasonable offer

Parts radios 2 Meter HTs

ICOM IC-02AT
KENWOOD TH-215
each w/manual, battery, charger, antenna
Complete but may not be working.
\$50 EACH OR BOTH FOR \$80.00

AEA PK-232 (NON MBX) Packet Controller

W/Manual
\$40.00

wb8deg@arrl.net or (810) 227-7837

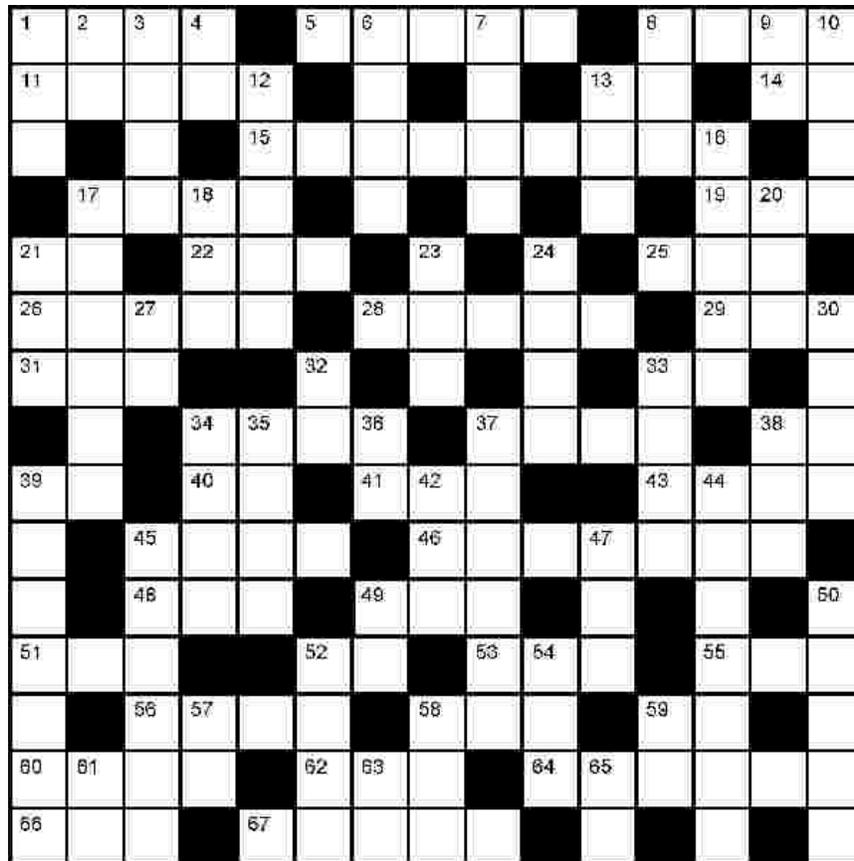
For Sale: Mint Condition - Kenwood TS-2000X Complete Amateur Station Package. Package Includes:

- Kenwood TS-2000X HF/6M/2M/440MHz/1.2GHz All Mode Base Radio (Serial# 30200011) complete with all original boxes, manuals, cables, connectors, etc. as if it were new from Kenwood.
- DRU-3A Digital Voice Recorder & VS-3 Speech Boards Installed
- Kenwood ARCP-2000 Computer Control Software with Serial Interface Cable
- NIB - Kenwood SP-23 Matching External Speaker
- NIB – Kenwood MC-57DM DTMF Microphone
- Astron 30amp. Switching Power Supply – Model# SS-30
- NIB - Bencher BY-2 Chrome CW Paddles
- Diamond X6000A Triband 2-Meter/70-CM/23-CM Vertical Antenna
- Diamond MX3000N Triplexer
- Quantity 1 - M2 6-Meter HO Loop Antenna
- Quantity 1 - M2 2-Meter HO Loop Antenna
- Quantity 1 - M2 432MHz. HO Loop Antenna
- Quantity 2 - M2 Extension Masts

All items are in mint condition, the antennas have some minor weather exposure but the whole station has been active less than two years. I am relocating soon and I need to part with my station at this time, but I am not leaving the hobby. I have over \$3500 invested here and I am asking \$2700 OBO plus reasonable shipping charges for the entire package, unless local pickup/delivery is an option (Southeastern, Michigan Area). Photos are available upon request!

Interested parties should e-mail me directly at: K8GLD@arrl.net

LED FUN! (Puzzle fun back by request!)



Across

1. Look through a large number of small things
5. What English does from left to right
8. A seller that cheats
11. Precious old equipment
13. AM and TV stations
14. Live or operating
15. Integer multiples
17. Place of entry
19. Bill
21. Amplifier whose output is the transmitted signal (abbr)
22. Month of CQ WW SSB contest (abbr)

- 25. Handy for carrying purchases**
- 26. What happens when 25 Across is overloaded**
- 28. The last offer**
- 29. A group of things sold as one unit**
- 31. Added to the sales price**
- 33. Too much current or power (abbr)**
- 34. What most customers seem to do best**
- 37. Works for any purchase**
- 38. Prefix of hams in Iraq**
- 39. Prefix of long, skinny SA country**
- 40. Prefix of hams next door to Iraq**
- 41. You have to get this from the FCC to operate in a non-standard way (abbr)**
- 43. One piece of gear**
- 45. Where most hamfest stuff has apparently been stored**
- 46. These radios hold boats in place**
- 48. Not mine (CW abbr)**
- 49. Period in time when things were done a certain way**
- 51. One section of a sales booth or stand**
- 52. One thousandth of a liter (abbr)**
- 53. Logarithmic unit of power (abbr)**
- 55. The real reason we go to hamfests**
- 56. The Great Lake that borders Dayton's state**
- 58. Gotta make this while the sun shines**
- 59. Where a superhet gets its gain (abbr)**

- 60. Overly technical individual
- 62. Rural electric utility (abbr)
- 64. Get interested or animated
- 66. Type of tower guy wire (abbr)
- 67. Dimples

Down

- 1. Apology (CW abbr)
- 2. Abbreviation that provides and explanation (Latin)
- 3. Type of market that's the same as a hamfest
- 4. Prefix of Costa Rican hams
- 6. How money is made the old-fashioned way
- 7. Hamfest prize
- 8. Our regulatory agency
- 9. If it's too expensive, just say this
- 10. Attached to controls for convenience
- 12. Sometimes taken in payment
- 13. Make an offer
- 16. Seller's area
- 17. Where hamfest purchases often go
- 18. How steeply RF leaves an antenna (abbr)
- 20. In the past
- 21. Adjusts width of IF filtering (abbr)
- 23. Parts assembled by the buyer
- 24. Building in which Hamvention occurs

- 27. Prefix meaning "no longer"**
- 30. Fine tuning adjustment**
- 32. Abbreviation for telephone call**
- 33. Home state to Dayton Hamvention**
- 34. Rip**
- 35. Ham position reporting system (abbr)**
- 36. Sunflower state (postal code)**
- 37. Our northern neighbor**
- 38. Say this when the price is right**
- 39. Place together as a unit**
- 42. Smells bad when a transformer is overheated**
- 44. Messages**
- 45. Who should beware**
- 47. This would be us**
- 49. Type of backlight for LCD displays (abbr)**
- 50. Often really "I want" (two words)**
- 52. Small or miniscule**
- 54. See ya later!**
- 57. Abbreviation for a street or byway**
- 58. Worn to prevent sunburn on the noggin**
- 59. Many transistors in one package**
- 61. The two fields of a radio wave**
- 63. Prefix meaning to cause or promote**
- 65. Size of a tee-shirt**