



# The Spirit of '76 and '88



Newsletter of the Lake Erie Amateur Radio Association

Editor: Ron Jakubowski, K2RJ

Publisher: Jeannie St. Marie, KC8MNW

## **FIELD DAY: JUNE 27 & 28**

*NO Dinner Meeting @ Dimitri's This Month!*

**LEARA Meeting at Field Day, Saturday, June 27, 5 P.M.**

As has been the custom now for the past several years, the June LEARA meeting is in conjunction with Field Day on Saturday, June 27, 2009, at Ohio Cleveland Lakefront State Park.

*There is no dinner meeting at Dimitri's this month.*

LEARA's 2009 Field Day Site will again be located inside the Ohio Cleveland Lakefront State Park, just north of Interstate-90 at the Martin Luther King Boulevard interchange, 8701 Lake Shore Blvd. (This is just west of the old Nike Missile Site and the Navy Finance Center and is also known as Upper Gordon Park.) Please note that this site is an Ohio State Park and our use during Field Day is not exclusive, so keep this in mind regarding language, noise and trash. Please be considerate! -AR-

### SCHEDULE

**Saturday—9 a.m.:** Site & Equipment Setup

**Saturday—2 p.m.:** FD Operations Begin

**Saturday—5 p.m.:** June LEARA Meeting

### DIRECTIONS

Take I-90 east or west to the Martin Luther King Blvd exit (exit 177) Head north towards the lake. Follow MLK past the freeway ramps (be careful; the ramps have the right-of-way here) and around to the right. There will be a sign on the left identifying the area as the Cleveland Lakefront State Park. The driveway will be on your left. Look for the site to the left/west of the parking lots, west of the Ranger Station.



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The *Spirit of '76 & '88* is published monthly except in December. Contributions must be received by the 2<sup>nd</sup> Sunday of the month (except on months with 5 Sundays and Tuesdays, when the 3rd Sunday will suffice.)

*Editor: Ron Jakubowski, K2RJ*

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## The Prez Says

by Alex Manuk, WD8JMM



Well, it's summertime! The kids are out of school, all the spring cleaning is done, all the antenna repairs are complete, and it's time to relax and enjoy good weather, good friends, and good radio. Of course, I mean Field Day! LEARA's Field Day is a treat, no matter what your amateur interests. Of course, it's a contest, and a preparedness exercise, but it's also a campout, a picnic, a meeting, a chance to try out that new antenna... just about anything you can think of.

Field Day this year is June 27th & 28th, at 'the usual location' – upper Gordon Park, off the Shoreway just north of the MLK exit. Setup usually starts around 9 AM on Saturday, with the contest kicking off at 2. We'll break for dinner (and our June meeting) at around 6, and then it's radio all night! Come on out and see what you can scare up on HF, or experiment with some of the VHF stuff we'll have available. As I said, whatever your interests, Field Day will provide something you'll enjoy!

Yesterday I participated in the Cleveland Kidney Walk, held at Wendy Park on Whiskey Island. After a few tense moments talking our volunteers into how to GET there (hint, it's NOT accessible from the Flats) we had a great time. There were a couple hundred walkers who did as many as 4 laps on the one-mile course. It was a beautiful day with bright sunshine, perfect temperatures, and just the right amount of activity to keep everyone occupied. I'd like to thank those who volunteered their time to help out yesterday: Mike, K8EHP; Mary, KC8YLC; Carl, KB8VXE; Leone, KB8VBR; Tom, KA8BZB, and Kelly, KC8UIX. While it was a VERY uneventful day, that's exactly the way we like it!

We've had a bit of trouble with the .76 machine over the past couple of weeks. As you may have noticed, it's forgotten what time it is, and the

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The Lake Erie Amateur Radio Assn., Inc., LEARA, is a not-for-profit [501(c)(3)] organization dedicated to Amateur Radio and Public Service. Club information packets and applications for membership are available from **Marv Grossman, W8AZO, 440-248-0031**, or may be downloaded from our web site at [www.leara.org](http://www.leara.org). Annual membership is \$25.00. LEARA's address is: LEARA, PO Box 22823, Beachwood, OH 44122-0823.

LEARA is an ARRL-affiliated club. When you join or renew the ARRL, LEARA benefits monetarily if you so through the club. Send ARRL Applications/renewals to Club Treasurer Dave Foran WB8APD, 5439 Nan Linn Dr. Willoughby, OH 44094-4365. Make the check payable to LEARA, not the ARRL.

**Membership Meetings** are held the last Tuesday of each month except December at Dimitri's Restaurant, 1830 Snow Rd., Parma, OH (in the Mid-Town Shopping Center, just west of Broadview Road). Dinner is served at 6:30 p.m. The meeting begins at 7:30 p.m. Meetings are open to all interested persons. You may attend without eating, but **reservations are required** if you do wish to eat. Call **Marv Grossman, W8AZO at 440-248-0031** to leave a message.

**Trustees' Meetings** are on the second Saturday of odd numbered months at 9 a.m. at the Parma-Snow Branch of the Cuyahoga County Public Library, 2121 Snow Rd., Parma, OH (opposite the Mid-Town Shopping Center). Meetings are open to all current members of LEARA.

***LEARA—Our 40th Year—History Part 1***  
**GROWTH OF VHF-FM IN NORTHEAST OHIO**  
*and the formation of*  
***The Lake Erie Amateur Radio Association (LEARA)***

by Bill Hess, K8SGX , First President of LEARA

*While some of the neighboring paragraphs in this history may seem to jump back and forth or describe unrelated happenings, the best format seemed to be keeping the history in chronological order as much as possible. All the content of this history is believed to be correct, but there are no guarantees. The text which follows may be reproduced provided it is not altered in any way and credit is given to the author as the source. If any person reading it has either additional information or corrections to make, please forward them to the author. I would like to take this opportunity to thank the following people for making contributions to this project; either as suppliers of additional information or as proof readers: Marv W8AZO, Charlie WA8WUU, Fritz K8WLF, Al K8EUR, Dave WB8APD, Gary W3DTN, Al W8TTY (ex-W8HYG) and Tom WA8BTN. Many of the dates of importance were verified with packing lists from International Crystal for crystals purchased either for the equipment to make a new system operational or for the radios I acquired to use it. The earliest of these packing lists are from 1960 when I first received my ham license.*

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scheduler doesn't quite work like it used to. Because of the limited access we now have to the repeater site, the Trustees have decided not to press the issue for now, but to work toward finding a home for the NEW .76 machine. Then, we can turn off the old machine and rework it as needed (for spare parts, etc). So, please bear with us as we continue to move toward relocating the machine, and rest assured, once that happens, the new .76 will be a huge improvement.

Well, that's all I have for now – I look forward to seeing many of you at Field Day on the 27th – and remember, no meeting at Dimitri's this month! -AR-

In the Northeast Ohio area, communications for Cuyahoga County Civil Defense (CD) was probably the start of two-meter VHF-FM activity. Around 1957 the U.S. Government purchased crystal-controlled General Electric commercial two-way FM equipment operating on 145.26 MHz for Cuyahoga County CD. This included:

1. two specially-outfitted school busses for use as mobile command posts
2. thirty to forty tube-type vibrator-powered GE mobiles
3. about a dozen tube-type dry battery-powered packsets or "portables" (hardly handhelds, as they weighed about 15 pounds and had about ½ cubic foot volume which consisted of about half electronics and half batteries inside a steel case) and
4. about ten base-station radios on that.

Each CD bus and the land-based command sites were also equipped with an Onan generator for ac power. This equipment was used for drills, weather disasters and other emergencies as well as general hamming and fortunately never for communications in case of the big bomb. Involvement with CD was the main thing that gave an introduction to many of us who were to be involved with VHF-FM. While the fixed-station sites did not require much work on equipment, there was always something to be done with the CD bus equipment - - at least for those of us who wanted to find an excuse to go to "the bus". Monday nights were "bus nights". We added new (to us) equipment, changed wiring, maintained what was there (since it was full of tubes) or simply swept and dusted. The most fun thing we did was to take the bus to a parade and we went as far as downtown Cleveland from North Randall, where the East Side bus was garaged. We also participated in hospital emergency preparedness exercises and just like today, sometimes went to a site and passed no traffic. The people running the exercise said they found our presence useful but it surely was (and still is) difficult to understand how.

There was also activity on six-meters FM - - even in

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## *LEARA—Our 40th Year—History Part 1, cont.*

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the mid-fifties. Because technician class amateurs were only permitted to operate on 52.5-54 MHz and most of us experimenting with six-meters were technicians, the very first FM activity in the Cleveland area was on 52.5 MHz using equipment with wide band (15 kHz) deviation. Actually there was no transmitter deviation limiting circuitry and these radios were probably 25 kHz wide but it didn't matter. No one else was on another nearby frequency to be bothered. 52.5 MHz was the lowest and therefore easiest frequency an old piece of commercial equipment could be converted to. A group of amateurs in the Shaker Heights area (Marv W8AZO, Pat W8GRG [SK], Ned W8GKS [SK], Jim K8QOT, Ron W8BBB [SK], John, K8IYM, John, K8QNE [SK], Rich W8GNI and finally Bill K8SGX [after receiving my license in Jan 1960]) converted their own equipment. These were most of the core membership of Heights Area Mobile (HAM), a group active on six-meters FM in the late-fifties. Later they realized that all of their lower transmitter sidebands were outside the band edge (52.5) but almost coincidentally the rest of the country was getting started on 52.525. The first pieces of equipment were obsolete police radios donated by the Shaker Heights Police Department (their technician was also a ham). Most of the old 2-case GE, Motorola or Link equipment being used was so agile that the crystals in use could be moved up 25 kHz to the new frequency. The really old army surplus FT243 crystals that some radios could use were in openable holders and could be lapped down (to raise the frequency) by scrubbing them on a glass plate with a small amount of household cleanser and water. Many old low-band radios did not have a padding capacitor to adjust the crystal frequency simply because it wasn't necessary.

A source of equipment for hams to purchase to get on FM was another problem. One of the earliest hamfests where equipment was available was at the Angola (Indiana) Hamfest. This 'fest was the work of the amateurs of the Tri-C College radio club, W9BF. Northwest Electronics from Chesterton Indiana (near Chicago) brought a truck full of old mostly-Motorola equipment for sale. For you old equipment buffs, it was 30Ds and 50Ds (receiver in one box and transmitter in another) with an occasional 80 or 140D thrown in. In case any of you think you don't have enough space for your mobile now, the trunk mount part of a 60 watt 140D measured 6x16x21" and weighed in at about 50 pounds. Power consumption of this type radio was about 3-5 amps

when receiving and 25-30 amps when transmitting and that doesn't include the 250 amp inrush when you key the mike and the dynamotor is getting up to speed. Believe me, it dims the headlights and you don't do this a lot of even receiving with the engine off if you want to start the car later. Then you had to run the power and control cables under the floor mats and seats and mount the control head and speaker and drill through the firewall to connect the 2-gauge "A" cable through its 50 amp fuse to the battery. Don't forget also that many of the old radios were 6 volt so you had to rewire the tube filaments to series/parallel and replace the vibrator power supply power transformer and the dynamotor (this motor-generator puts out the 400-600 volts for the transmitter PA tube(s). If you were getting onto six-meters as many of us did and your radio was 30-36, or 36-42 MHz split, you also had to cut all the air-wound coils and change the loading caps on all the other tuned circuits. This was frequently a cut-and-try procedure and when you were all done, the radio might have some oscillation or low drive in the transmitter or poor sensitivity or "birdies" in the receiver. Now what do you do? While the equipment for sale there was old enough to have loktal tubes in it, at the time, it was only about ten years old and for those of us fortunate to get something moved to the amateur band and tuned up correctly, we had a lot of fun even without repeaters. It was only low- and high-band. (Commercial low-band is considered 25-50, high-band is 136-174 and UHF is 420-512 MHz). There was nothing old enough on UHF to be available surplus in fact UHF wasn't even in use for land mobile communications at the time. This was one of the main sources of FM radios for those of us in Northeastern Ohio in the early 60's. The equipment sold there is now so old (all tubes) and wide-band it doesn't even show up at today's hamfests.

This type of radio and its power consumption is one of the main things that made the Leece Neville Company well known in the fifties and sixties. Among other products, they manufactured quite large automotive alternators (rectifier and regulator external to the machine) which would keep your battery up while using this type of radio in public-safety service, as well as for those of us who had more than one radio in our trunk tuned to some amateur channel. It was a real prize, for those of us who had them, to find a used Leece Neville alternator.

There has always been a general need and desire for better communications. In 1958 or 1959, the first

## *LEARA—Our 40th Year—History Part 1, cont.*

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repeater was in the area constructed and installed by Dick Jedlicka, W8PVQ and friends. The transmitter which put out about 300 watts (on 145.26) was in the clock tower at Highland View Hospital (same location used by CPD for their east receiver) which was located on top of the Harvard Rd hill ("the hill") in Warrensville Township (now Highland Hills) in eastern Cuyahoga County. Because the Highland View Hospital site was used by Civil Defense for its main communications control center, the people who worked on the repeater (and were CD members) had access to install equipment at that location. All the transmitting and receiving equipment was tube-type throughout. The receiver on 145.68, along with a preamp and a cavity resonator, were sheltered from the weather in a big wood box located on the catwalk of the green water tower on "the hill". The system operated in the middle of the AM portion of the band and was certainly not appreciated by the amateurs who heard its I-o-u-d signal there. Most of the two-meter activity was from 145.0 to 145.4 since, again, most equipment in use was converted military surplus and the higher in frequency you went, the harder it was to make the conversion work.

The receiver and transmitter were connected by a run of surplus tar-covered army field-phone wire. We pulled the wire through a steam tunnel that interconnected the Highland View and Sunny Acres hospital complexes and then connected to unused "house pairs" of their phone systems. It is also of interest that the repeater output was on the simplex frequency and the input channel was 420 kHz higher. These frequencies in particular were used because they were assigned RACES (Radio Amateur Civil Emergency Service) channels and the repeater was originally installed for RACES communication. These were both excellent locations, but the problem of climbing 100 ft or so up the water tower made servicing the tube-type receiver most inconvenient (and it seemed to develop some type of problem 3 or 4 times a year). Most of the activity was confined to Monday nights around 8:00 when the weekly CD drill was held since this generally was the only time the repeater was on. This type of activity generally did not draw newcomers to FM. There was little enough activity and no one else to control the repeater; so when Dick left the area in 1962 to join the service, repeater operation was discontinued.

To comply with the then-stringent FCC regulation regarding keeping a log of all operation of every ham

station (and a repeater is considered a station), all repeater usage was tape-recorded. The FCC relaxed their requirements and this practice was eventually amended to only recording phone patches in the early eighties and finally totally eliminated a few years later. However, in these days of "dirty" transmitter or sometimes-purposeful interference, the information recorded could be of use toward eliminating the situation.

Some simplex activity on 145.26 MHz continued however since many of the county-owned radios were installed in RACES members' private automobiles. There was also some CD activity on six-meters on 53.58 MHz with old two-case Link and Motorola equipment. Other hams had radios on 52.525 MHz, which was and still is the national calling frequency, but did not have any connection to CD.

Saturday, it was decided to drive back to "the hill" late in the same evening and connect the transmitter back to an old antenna. It proved to be the errand just in time - - the following morning the Palm Sunday April 11, 1965 tornadoes touched down in Pittsfield and the repeater was used for emergency communications pertinent to the disaster. It is interesting to note that with the mobile equipment in use at the time, Pittsfield was about at the limit of the repeater's coverage in spite of the fact that the signal was considerably better than is currently provided on .76. At the time, the best sensitivity receiver along with a good preamp was about 6 to 10 dB less than that easily obtained today and for the most part, the tube and vibrator-powered radios only had 25 watt transmitters. Since there was no surplus UHF equipment for links, there were no remote receive sites. In fact, a remote receiver was not even a consideration at that time.

During the winter of 1966-67, the old power amp was repaired and the previous GE ET-1 exciter was replaced with a GE Progress Line transmitter (still all tubes). The system was sophisticated enough that the transmitter on "the hill" was capable of being operated as a repeater or a direct base station with remote control at Cuyahoga County CD Headquarters at 4200 S Marginal Drive. A "turn off/on box" that counted the number of rings on the phone was built by K8SGX. When you wanted to turn the repeater on, you would call the phone and let it ring 6 times, hang up, recall the phone and let it ring 8

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times and hang up. To reverse the process, you would call and let the phone ring first 8 times, then 6 times and the repeater would turn off. Not terribly reliable, but with its dozen-plus relays, it usually worked and control could be accomplished on a phone which was only attended during the day. The box had local on and off buttons on its front for local use. The Cuyahoga County Radio Club was formed around this operation with callsign WA8TZQ and trustee Ed Reilly, W8OKE. Regrettably, the number of volunteers for operating the control diminished from no more than two or three at best to zero so operation again reverted to "Monday Nights" or emergencies. In the months to follow, the CD office was closed and with it went the most important control station.

Slowly, various stories about repeaters operating in the 146 MHz portion of the band began to be heard. Much of the activity was centered around the General Electric facility in Lynchburg, Virginia and the hams who worked there. As early as 1963, there were rumors of several hundred users on a 146.34-.94 repeater in Lynchburg in comparison with our relatively few on 145.26. The activity in Virginia kept spreading and finally arrived in our area, perhaps in 1963. The first new simplex was on 146.94 and its popularity quickly spread to Cleveland. It was a welcome change which would eventually alleviate the continuing interference problems caused by the repeater on 145.26. In the late 60s, there was almost no activity in the 144-145 or 146-148 MHz portion of the band.

Earliest records of the FM Hybanders Club are from March 1968, about a group interested in a privately-sponsored two-meter repeater in the Cleveland area. Several of the hams involved with this venture were the previously mentioned Cleveland Police Radio operators at the central station. This included those who hammed on the low-bands. The repeater was put on the air under Greg Nasiatka's callsign K8VFL with the input on 146.88 and the output on 146.40. It had a homebrew all relay logic autopatch. The autopatch interface which did not actually decode, regenerate or use Touch-Tone® (Bell System's name for Dual-Tone-Multi-Frequency [DTMF]) to perform any functions other than connect or disconnect the patch itself, was located at the receiver site in Seven Hills. This was one of the first Ohio Bell Telephone areas with operational Touch-Tone® service at the time. The machine and frequency pair

was re-coordinated to 146.28-88 under the callsign of WB8CRV in August 1970.

To give an idea of the difficulty of converting and then using commercial two-way equipment for amateur use, the operators in the '70s on two-meters in Lorain County purchased crystals for their radios for 146.98. Many of them would not warp onto frequency so the frequency they operated on, since there were no 'channels', was 146.979. They moved to 146.34-.76 once the repeater was established.

From acquaintances made with these hams on six-meters FM, some of us residing in eastern Cuyahoga County had an increasing interest in moving their repeater equipment from a site in Lorain County that was not as good as Highland View and Sunny Acres Hospital. Since the equipment would cover Lorain from its new location, it was agreed to move it in early 1969. Coverage was excellent from "the hill". Its power output was 400 watts (with antenna gain, it produced about 4000 watts ERP [effective radiated power]. The ERP is now approximately 400 watts.) At that time, the receiver was located at Sunny Acres Hospital in a corner of one of the elevator penthouses.

In 1969, it was decided to form a club around another new repeater with input on 146.34 and output on 146.76. To help support and coordinate the repeater, the Lake Erie Amateur Radio Club was formed with charter meeting held on 27 May, 1969 with 10 members present: Howard Baker K8NHR, Ken Bobel WA8YJW, Mike Cross K8JLO, Marv Grossman W8AZO (secretary), Dick Hartwig K8TEC west VP, Fritz Hemrich K8WLF, Bill Hess K8SGX (president), Don Nelsch K8EIW (east VP), Jim Pracker K8QOT (treas), And Chuck Rennolds WA8WUU. These first meetings as well as the meeting where the club was finally formed were held at many locations with the charter meeting held at the Holiday Steak House (no longer in existence) on old Route 6 and 2 in the Vermillion/Lorain area. Since many of the original members of the club and the old GE equipment came from Lorain County, this was a natural geographic area for meetings, although a bit far for eastern Cuyahoga county residents.

Al Amster W8HYG filed for a license, WB8CQR, which was dated effective November 19, 1969, permitting the club to get a station (the repeater) into

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## *LEARA—Our 40th Year—History Part 1, cont.*

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operation. Again, the transmitter was put in the Highland View Hospital clock tower and the receiver was in one of the elevator penthouses at Sunny Acres Hospital. There were continuing disadvantages even from the days of 145.26. We were permitted to have the receiver in the elevator machinery room (with antenna mounted on the roof) but were asked to keep it out of the way so it was located in a corner behind the elevator electrical equipment. There wasn't enough space to put anything there much less the receiver - - behind the same equipment we coped with in the days of 145.26 - - exposed flyball governors, electrical equipment and all. The bonus was, of course, a good location for the receive antenna and a nice short transmission line to the receiver. At the transmitter site directly behind the clock face, there were places where pigeons could get in through broken glass in the clock face. They would fly around along with their friends the flies - - millions of them - - dormant on their backs all over the place in the winter and buzzing around your head and in the equipment in the summer.

Sometime, in about 1970, there was a fire in the upper dormitory floors of Highland View Hospital under the clock tower and, although there was relatively little structural damage to the building, the power (damaged in the fire) which ran the transmitter was turned off. This necessitated running a 250 ft extension cord all the way from CD headquarters in the basement to the transmitter which was located behind the clock face. After the fire, there was no heat or lighting in the upper part of the building so it was brrrrr in the winter and always a flashlight to get through the hallways and up the long metal stairs to the top floors in the day or night. After the fire, rain leaked in and eventually damaged the upper portion of the building to the point that it was decided to tear it (and our transmitter site) down. The clock itself was salvaged and repaired and moved to Lakeland Community College (Route 306 @ I-90), where it can still be seen.

First attempts at identifiers were archaic by today's standards. The first voice IDer used on WB8CQR (.76) was a magnetic recorder/player that used a round plastic disc with a piece of 1/4" magnetic tape glued to the edge of it. It revolved one revolution per ID (maybe 5 seconds). It accomplished the required task but inconsistencies in revolution speed, tape-to-head contact changes and temperature variations made it sound lousy. Finally, in Feb 1970, it was

replaced with a solid state CW identifier designed by K8EIW and was connected to an all-discrete-transistor control card designed by K8SGX, which started an ID and provided hang timer and repeater timeout functions. This new identifier used RTL logic and a 150-germanium-diode matrix (not easy to program or repair).

Probably the most significant thing that happened to VHF-FM, at least in the early 1970s, was a large-scale introduction of two-meter equipment, manufactured specifically for amateur use. Prior to about 1971, the only affordable equipment available was used converted commercial equipment. That was all there was. The Inoue Varitronix IC-2F with one transmit power level of ten watts and maximum of six crystal-controlled channel capability, was among the first radios soon to be followed by the IC-20, Regency HR2 and the Standard 826 (crystal controlled). Dycomm power amplifiers were frequently used since radios typically put out only 10 watts. The RP synthesizer was about the first of that type of equipment on the market. It was not a radio just an additional synthesizer which could be connected to an existing radio. There were no amateur hand-helds available at the time and Icom, Kenwood or Yaesu were far from being on the market. There were only limited amounts of not-very-portable battery operated 'portables' and they were not really within the price range of the average amateur. Some of these 1970s-vintage portables had tube or hybrid (part tube and part solid state) transmitters to go along with the solid state receiver. This either meant high voltage batteries or 'T'power to get the high voltage - - more heavy batteries.

The first approach to guard on repeaters was frequently by audible tone-burst rather than sub-audible tone-guard or PL<sup>®</sup>. Again, the sub-audible encoders and decoders needed that would stay on frequency and keep working were surplus Motorola equipment. Many operators without tone encoders tried whistling up the repeater. This turned out to be only fair, at best. These early radios did not meet the carrier frequency stability of commercial equipment either and were often off-frequency. This might not have been a problem if your repeater receiver was of like wide bandwidth but .76 always incorporated a commercial receiver of one type or another. The problem also changed as the ambient temperature of the vehicle's trunk changed. Early commercial two-way radio equipment was trunk-mount. *To be continued next month.*

## LEARA "On The Air"

### Club Net Information

by David Noeth, KD8ACO

*The feedback received from members regarding the new Thursday Club Net promotion as announced on the net and at the May membership meeting has been very encouraging. This new promotion encourages participation in both the weekly club net, as well as, the monthly LEARA membership meetings. Specifically, any individual who checks into the Thursday Club Net during a given month will be given one extra door prize ticket at the following month's LEARA club meeting. This extra door prize ticket will be given in addition to any other door prize tickets the individual has already been given. Participation in only one net during a month would be required. Participation in the monthly meeting would obviously be required.*

#### Wednesday Skywarn Practice Net

Skywarn practice nets have returned on the 146.760 (-offset, 110.9 PL) repeater and will continue on Wednesday nights at 8:00 PM local time until the last week in October. Everyone is welcome! The 146.880 (- offset, 110.9 PL) repeater is used, when needed, as a backup. Skywarn nets may be activated on one of these repeaters anytime threatening weather is approaching.

#### Thursday Club Net

The Lake Erie Amateur Radio Association's weekly club net is held every Thursday evening at 8:00 PM local time on the 146.760 (- offset, 110.9 PL) repeater. This is an open and informal net intended to provide the opportunity to test radio equipment, promote fellowship among local amateur radio operators, and develop radio traffic handling skills. You do not have to be a member of LEARA to participate.

Since the club net is a practice and informal net, LEARA would like to recognize those who take the time to check in and keep the net active and alive. During the past month, the weekly Thursday Club Net had a total of sixty-three (63) check-ins. The following were reported by our net control stations to have participated:

Bill AC8CO, Randy K8CLE, Gene K8ECL, Mike K8EHP, Jeff K8JTK, Steve K8SAS, Bill K8SGX, Fritz K8WLF, John KA8GZA, Bill KA8VIT, Matt KB1LCS, Lilly KB8MHZ, Ted KB8PRK, Carl KB8VXE, Jeff KC8FNK, Mark KC8FQV, Jean KC8TJH, David KD8ACO, Randy KD8AIR, Eddie KD8FTS, Don KD8ICR, Keith KD8KBL, Chris KD8LCV, Eddie

KD8LEC, Don KJ5KB, Bob N4RAZ, Tom N8UAZ, Bill N8UPZ, Bob W2THU, Matt W8EBB, Rick W8HV, Ray W8SLZ, Stuart W8STU, Gary WA8TJL and Mark WD8KHU.

Net Control Stations: Eric N8AUC, David KD8ACO, Ken KG8DN, and Bob W2THU.

Upcoming NCS assignments are:

6/18/09	Eric	N8AUC
6/25/09	Ken	KG8DN

#### Saturday SSTV Net

The Lake Erie Amateur Radio Association's weekly slow scan TV net is held every Saturday evening from October through May at 8:00 PM local time on the 146.880 (- offset, 110.9 PL) repeater. Mark your calendar, the SSTV net will resume this fall on the evening of October 3, 2009.

#### Wanted! Net Control Stations

We now have five Net Control Stations for the Thursday evening LEARA Club Net. There's always room for more stations who would like to give it a try.

Any member of the Lake Erie Amateur Radio Association can be a net control operator for one or all of the nets held on one of the club's repeaters. Never tried it you say? No problem. Now would be a really good time to start. It's as easy as getting in touch with me and we'll schedule you into the rotation. If you should have any questions or requests for assistance to get started, just contact me at one of our club meetings or by using any of my contact information in the membership directory or send me an email at [kd8aco@leara.org](mailto:kd8aco@leara.org). Hope to talk with you "on the air" soon! -AR-



***LEARA is an Affiliated Club of the ARRL. If LEARA members join or renew their ARRL membership through the club, the LEARA treasury gets to "pocket" a portion of your dues. Another neat way to support your local club!***

## Hamfest Listing

**11 Jul 2009** 8th NW PA Hamfest  
 Union City & Wattsburg Wireless  
 Associations  
<http://www.nw-pa-hamfest.com>  
 Talk-In: 146.700 (PL 186.2)  
 Contact: Ron Rycek, KB3QBB  
 1412 Grant Avenue  
 Erie, PA 16505  
 Phone: 814-833-6829  
 Email: [kb3qbb@arrl.net](mailto:kb3qbb@arrl.net)  
 Greene Township Municipal Building  
 9333 Tate Road

**12 Jul 2009** North Hills ARC  
<http://nharc.org>  
 Talk-In: 147.09  
 Contact: Cathy Heiles, KB3OYS  
 134 Easley Road  
 Pittsburgh, PA 15237  
 Phone: 412-486-2785  
 Email: [nharchamfest@hotmail.com](mailto:nharchamfest@hotmail.com)  
 Northland Public Library  
 300 Cumberland Road  
 (McCandless)

**18 Jul 2009** NOARSFEST  
 Northern Ohio ARS  
<http://www.noars.net>  
 Talk-In: 146.70- (open repeater)  
 Contact: Darlene Ohman, KA8VTS  
 4122 Bush Avenue  
 Cleveland, OH 44109  
 Phone: 216-398-8858  
 Email: [dfohman@att.net](mailto:dfohman@att.net)  
 Lorain County Community College  
 (Spitzer Conference Center)  
 1005 North Abbe Road

**26 Jul 2009** Portage Hamfair '09  
 Portage Amateur Radio Club  
<http://Hamfair.com>  
 Talk-In: 144.790/145.390  
 Contact: Joanne Solak, KJ3O  
 9971 Diagonal Road  
 Mantua, OH 44255  
 Phone: 330-274-8240  
 Email: [kj3o@arrl.net](mailto:kj3o@arrl.net)

## Welcome New LEARA Members!

Please heartily welcome the following Hams who joined over the past month:

**Aron Katz—KA8LDE**  
**Helen Bell—KC8IKK**

## Volunteer Exam Dates and Locations

(from the ARRL website)

**21-Jun-2009**  
 Sponsor: LORAIN COUNTY  
 ARA RED CROSS  
 Time: 1:00 PM (Walk-ins allowed)  
 Contact: CHARLES HALL  
 (216)453-3700  
 Email: [VE@W8HF.COM](mailto:VE@W8HF.COM)  
 VEC: ARRL/VEC  
 Location: AMERICAN RED  
 CROSS  
 2929 W RIVER RD N  
 WWW.W8HF.COM (HOME  
 PAGE)  
 ELYRIA, OH 44035

**27-Jun-2009**  
 Sponsor: 20 OVER ARC  
 Time: 10:00AM (Walk-ins al-  
 lowed)  
 Contact: ALLAN AVNET  
 (330)549-3051  
 VEC: ARRL/VEC  
 Location: GATE 1 AT CAN-  
 FIELD FAIRGROUNDS  
 FAIRGROUND BLVD.  
 CANFIELD, OH 44406

**11-Jul-2009**  
 Sponsor: SUMMIT CO AMERI-  
 CAN RED CROSS  
 Time: 12 NOON (Walk-ins al-  
 lowed)  
 Contact: BRUCE M FERRY  
 (330)929-2766  
 VEC: ARRL/VEC  
 Location: AMERICAN RED  
 CROSS  
 501 W MARKET ST  
 HTTP://WWW.AK8B.US/VE  
 AKRON, OH 44303

**12-Jul-2009**  
 Sponsor: CUYAHOGA ARS  
 Time: 9:00 AM (Walk-ins al-  
 lowed)  
 Contact: GARY S DEWEY  
 (216)642-8705  
 Email: [GDEWEY@EN.COM](mailto:GDEWEY@EN.COM)  
 VEC: ARRL/VEC  
 Location: TOWN HALL  
 6652 BRECKSVILLE RD  
 STATE ROUTE 21  
 INDEPENDENCE, OH 44131

**19-Jul-2009**  
 Sponsor: LORAIN COUNTY ARA  
 RED CROSS  
 Time: 1:00 PM (Walk-ins allowed)  
 Contact: CHARLES HALL  
 (216)453-3700  
 Email: [VE@W8HF.COM](mailto:VE@W8HF.COM)  
 VEC: ARRL/VEC  
 Location: AMERICAN RED CROSS  
 2929 W RIVER RD N  
 WWW.W8HF.COM (HOME PAGE)  
 ELYRIA, OH 44035

**25-Jul-2009**  
 Sponsor: WRECS  
 Time: 9:00 AM (Walk-ins allowed)  
 Contact: ROBERT C GAUSS  
 (330)562-3328  
 Email: [N8ZB@YAHOO.COM](mailto:N8ZB@YAHOO.COM)  
 VEC: ARRL/VEC  
 Location: BENTLEYVILLE VIL-  
 LAGE HALL/CHAGRIN FALLS  
 6253 CHAGRIN RIVER RD  
 CORNER SOLON RD & RIVER RD  
 BASEMENT  
 BENTLEYVILLE, OH 44022

**01-Aug-2009**  
 Sponsor: LAKE COUNTY ARA  
 Time: 12 NOON (Walk-ins allowed)  
 Contact: SCOTT FARNHAM  
 (440)256-0320  
 Email: [SCOTTFARN-  
HAM@ROADRUNNER.COM](mailto:SCOTTFARNHAM@ROADRUNNER.COM)  
 VEC: ARRL/VEC  
 Location: KIRTLAND LIBRARY  
 9267 CHILLICOTHE RD  
 ROUTE 306  
 1.7 MI S OF I-90  
 KIRTLAND, OH 44094

**01-Sep-2009**  
 Sponsor: CUYAHOGA FALLS ARC  
 Time: 7:00 PM (Walk-ins allowed)  
 Contact: BRUCE M FERRY  
 (330)929-2766  
 VEC: ARRL/VEC  
 Location: STOW-MUNROE FALLS  
 PUBLIC LIBRARY  
 3512 DARROW RD  
 HTTP://WWW.AK8B.US/VE  
 STOW, OH 44224

# Ham Radio Estate Sale

## Equipment owned by Tim Culek, KQ8TC (SK)

This is the last group of items, and are sold in “As Is” condition. Prices are negotiable. Contact “Dee” Logan, WIHEO at [delogan@ameritech.net](mailto:delogan@ameritech.net) or call (440) 352-8292 before 9:30 p.m.

ITEM	MODEL	STATUS
TVI filter	B&W FL-10/1500	Available
MFJ multiple DC power outlet strip	MFJ-116	Two units
Motorola rapid charger	NLN8858 output 10.6v DC @ 1600MA	
Archer 20A noise filter	270-055	
MFJ wall wart power cube	MFJ-1312 12V DC @ 300MA	
SONY power adapter wall cube	AC-T58 9V DC @500MA	
USB cable – Six feet	All Electronics CB-383	Two cables
RG8 50-foot coax cable assembly	ProComm – 50-8X	Two cables
ARRL Repeater Directory 2006-2007	Desktop edition & Pocket edition	
ARRL GPS & Amateur Radio book	Copyright 2007	
Gordon West Radio School on cassettes	General class code – six cassette tapes	
ARRL book: “From Spark to Space” 1914-1989	Hardcover – Copyright 1989 \$20 original price	
Gordon West Radio School on cassettes	Advanced theory – six cassette tapes	
Rubber duckie antenna	Unknown frequency – BNC connector	

## LEARA — The Lake Erie Amateur Radio Association

*- 40 Years of Serving Greater Cleveland Since 1969 -*

### VOICE REPEATERS:

- |                       |  |
|-----------------------|--|
| <b>146.76/R-</b>      | • Highland Hills (Use 110.9 Hz tone for remote inputs in Lakewood, Newbury & Willoughby) |
| <b>146.88/R- IRLP</b> | • Lakewood (Requires 110.9 Hz tone) IRLP Node 4282                                       |
| <b>224.90/R-</b>      | • Lakewood (141.3 Hz tone)   |
| <b>444.40/R+</b>      | • Highland Hills (131.8 Hz tone)   |
| <b>444.70/R+</b>      | • Lakewood (131.8 Hz tone)   |
- (.76, .88, .90 and .70 offer emergency and member-only autopatch lines.)

**PACKET NODES:** CLE1 145.01 MHz: CLE5 145.05 MHz: CLEV220 223.70 MHz

These nodes are part of the Cleveland Net Cluster in K8EIW's backbone system.

- GENERAL:** NBRY • 145.07 MHz & 223.70 MHz (KA-NODE)  
 NBRYX • 145.07 MHz ⇔ 223.70 MHz Gateway  
 LEARA • 145.07 MHz & 223.70 MHz PBBS

### INTERNET:

- [www.leara.org](http://www.leara.org)
- To subscribe via e-mail, send a message to: [spirit76-request@leara.org](mailto:spirit76-request@leara.org)  
 Put *subscribe* in the subject area and your *name* and *callsign* in the body.