The Open Feed Line

Volume 9, Issue 1 Friendship, Community service & Advancement of the Hob*by* Sept- Oct 2000

SUPER SWAP 2000

Once again, GRARA, LARC and MARA are putting on the Super Swap. Jack Amelar NY8D is the person to call if you wish to become part of this ham happening. Even at this late date, warm bodies are needed. We could use folks to provide Talkin, Table Setup, as well as Table Tear down Ticket sales and Security. Of course, if you wish to help display your club to the curious hams of West Mi. you might think about helping to tell others about your club and what you find great about it. There will be tables provided for local ham clubs.

Table Setup: September 15 5:30PM

Table Tear Down September 16 1:00PM

Super Swap 2000 will be held at :

Calendonia High School

9757 Duncan Lake Ave Se

Calendonia MI.

If you wish to become part of this, give Jack a call

At (616) 897-6885 " SEE YOU THERE!"

UP COMING HAMFESTS

9/16/00	SUPER SWAP 2000
10/8/00	Central MI ARC Lansing W8ERV
10/15/0	Kalamazoo ARC Kalamazoo K8BLO
10/22/0	Utica Shelby Clinton Twnshp.KC8IAQ

Brave New World

Part 2

By Rich Ranta K8JX

It's been several months since Restructuring went into effect. The results have been various: super crowded 40 and 20 meters on phone, but almost the same number of folks on the cw sections. While we haven't seen the new VE tests, the FCC has said it will not reduce the contents or requirements for the three license classes. So how should our club respond to this newly licensed world? Why, by offering a Morse code class, that's how! Teaching and increasing CW proficiency, regardless of whether it is required or not, insures that ALL the Ham bands will be used to their fullness. Now that the only code requirement is 5 WPM, our code teachers can apply all their skill in just teaching the code without concerning themselves about increasing speed. What used to be thought an impossible task, can now be done well in a short amount of time. We will be offering learning the Morse code class, On the Air. We will teach each letter, number and selected punctuation over the air. This will be the 7th time a class has been taught over the air and each one has had it's own success level, whether it be having somebody report they actually passed the cw exam, to thanking us for providing them with the practice. But learning the code and becoming proficient with it are two separate areas. Yes, we can provide you with what you need to learn and pass 5 WPM, but only by working on using the code will you ever get proficient with it. We can use the Remote Base to provide scheduled speed practice sessions. We can bring back the old 10 meter cw round table net. Now if you really want to increase you cw proficiency, thats the way. Stay tuned for further information.

The Open Feed Line

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Membership information

The Michigan Amateur Radio Alliance, an American Radio Relay League affiliated club, was created to provide opportunities for friendship, community service, increase technical knowledge and upgrading our skills in the hobby of amateur radio. Annual dues to MARA are $20. Family memberships are also available. Persons aged 70 and over have the rate of $5.00. Memberships expire on December 31 and club dues are due on January 1st. MARA membership is open to all interested persons.

Everybody is encouraged to submit original articles to the editor on disk, fax or by mail. The deadline for submission is the end of the 2nd week of February, May, August and November. Please send change of address information and membership applications to the club secretary.

Great Lakes Award

Send inquiries regarding the Great Lakes Award to the Awards Manager Brian Scholten KC8DOC c/o
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Club activities

MARA holds their weekly 2 meter Net on the MARA W8USA repeater, 145.410 MHz -600Khz PL. 94.8., every Thursday, at 8 PM,except the 2nd Thursday of the month. MARA holds their monthly meetings on the 2nd Thursday of the month at Saint Adalberts Benevolent Society Aid Hall, located at 5th Street and Davis NW. We meet at 7:30PM upstairs. All are welcome. (* Indicates temporary filled)

HOW I SPENT MY SUMMER

(I received the following E-Mail, and it was good enough to share with you all. Enjoy! K8JX)

The South Manitou report: by Jim KI8JD

The South Manitou Island trip is in the past. We left Grand Rapids about 6:00 AM Friday morning, and I got home about 10:00 PM Tuesday night. The boat trips were quite smooth. I drove through the storm all the way from Cadillac.

For a number of reasons, we didn't make as many contacts as on the Beaver Island trip. For one thing, we only had one rig on the air. We were guests of the Forest Rangers, and had to operate accordingly. We had a 9:00 PM shutdown time. The General voice bands were almost unusable, I think due to the restructuring. Way too crowded. We tried and tried to make contact with GR hams, but only contacted a few of them. We talked to Bud KG8BK, Columbo KF8AN, Jerry W8MSK on several bands, Mark AB8MS in Tekonsha, Eric VE3/K8CCA in Canada, and Roman N4SC/mobile on 6 meters. We also contacted Roman and Chuck W8VOM with my hand-held on 2 meters. Looking back, I should have spent more time on CW. On voice, I often called CQ with little result, partly due to QRM. On 30 meters, someone always came back to me, but they wanted to rag-chew about our trip, which was OK. There were a few dozen people who were absolutely thrilled to make contact with the island, and their appreciation made it all worthwhile. Mark AB8MS put us on the cluster Monday night, and we had a small pile-up on 3.813. Thank you Mark. I wish we could have been spotted more often.

It sure is a beautiful island. There are millions of chipmunks and daddy-long-leg spiders. There are eagles and a bear on the island, but no deer. There are many birds-of prey, hawks, falcons, or whatever they are. They also have many cottontail rabbits, and I saw a large snowshoe rabbit several times, I think it was the same one. No one actually lives on the island anymore, but there are two small privately owned lots. The rest of the 5000-acre island is a National Wilderness Park. And it is wild. It was a half-mile walk just to get water. I took a quick dip in the bay almost every day, and the water was fairly warm, and awfully clean.

I must have walked 50 miles, I know I walked over 20 miles. Round-trip, it was one mile from the rig to our campsite; I should have counted how many times I made that trip. Chuck's son, Dustin, came with us, and we both made the 7-mile trip to the giant cedar trees, while Louie and Chuck manned the station. The cedar trees are over 500 years old. My calves are still sore. We were not allowed to bring anything with wheels. Everything was walk and carry. There are almost no cigarette butts or trash on the ground, and if we saw something, we would pick it up and dispose of it.

With all things considered, it was a good trip.

73, Jim KI8JD

Member News

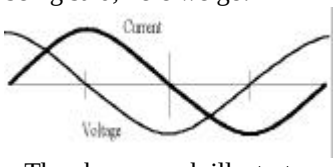
Wayne Dowling KB8VOZ can finally put his feet up. As of September 1st, he's joined the ranks of retired persons. Wayne, who worked for Amway, now plans on spending more time on Ham radio, and is starting to look for a part time job. First up though, is increasing his code speed so he can work those hard to get DX stations. He also is scheduling the RainReport for the Thursday night MARA net. This is different from Newsline, but just wait and you can hear for yourselves. As for right now, " Honey, bring me my slippers!"

Mike and Nancy Eilers K8OOK are not retiring, just planing on a County Hunters vacation. They are going down to several Eastern States, Florida, North-South Carolina and work from areas where there simply isn't any Hams operating. They have done this before and really enjoy it. You get to see the USA and meet some really wonderful people. Mike would like to see MARA get involved in working from several hard to get Michigan counties: Keweenew, Holton, just to mention two. This could become a wonderful way in which our member learn what its like to be the other side of DX. A thrilling experience. You can work Mike and Nancy on 14.336 MHz.

AC Theory

Part 1

I have been a ham for only 4 years, but even prior to that, I found antenna and feed line theory to be interesting, and certainly a challenge, at least for me. I am by no means an expert; in fact, the following article may contain errors. If so, we will certainly hear about it. Hi-hi. I wrote this article to encourage interest in this subject more than to educate. I also hope that it serves to inspire some of the local wizards to share their knowledge. Of course, there is no substitute for reading the books written by the known wizards. If you are interested, get your hands on as many of these books as you can, you may learn a little from each book. That being said, here we go.



The above graph illustrates an important relationship between current and voltage on an antenna or feed line. I have chosen to illustrate one complete cycle, in a resonant circuit. You can think of the thin horizontal line as a wire or feed line that is cut to exactly one electrical wavelength. You may be accustomed to seeing only the left half of this graph. The left half is often used to illustrate a resonant half-wave dipole, usually fed in the center (at the short vertical line).

Notice that when the current is at zero, the voltage is at either positive or negative maximum. Also when the voltage is zero, the current is at positive or negative maximum. From Ohm's Law, we know that when the current is zero, and the voltage is high, we have very high impedance. Likewise, when the voltage is zero, and the current is high, we have very low impedance.

The impedance is very high on the extreme left side of our graph. A quarter wavelength towards the right, the impedance becomes very low. If we go another quarter wavelength towards the right, it becomes very high again. Because of this fact, we say that a quarter wavelength of feed line "inverts" the impedance. If we hook an antenna analyzer to one end of a quarter-wave feed line, and leave the other end open, the analyzer will show a short circuit. If we short the other end, it will show an open circuit. You can think of a quarter wavelength of feed line as a transformer. It has a low impedance (low voltage) on one end, and a high impedance (high voltage) on the other end. I have over-simplified this somewhat; there are other factors involved. For instance, if you hook one end to a 50-ohm load, you will still have 50 ohms at the other end. The feed line seems to invert the impedance with respect to the characteristic impedance of the feed line. But I must stop here; I have started to leave the realm of my knowledge.

Now if we compare the impedance at the extreme left to that in the center of the graph, we find that both points have very high impedance. Also, if we compare the impedance at the ¼ point and at the ¾ point, we find that the impedance is low at each point. Therefore, you can see that a half wavelength feed line "mirrors" (reproduces) the impedance. A half wavelength of feed line will have the same impedance at both ends. For this reason, it is helpful to use a half wavelength of coax, or a multiple thereof, when tuning (building) an antenna. Some people feel that coax should be "tuned" to a multiple of a half-wave for maximum performance, however, if your antenna is matched correctly, the length of the coax won't make much difference.

Before you start cutting coax to any particular wavelength, you should know how to compute the length. This will be covered in my next article, if I can get Richard to print it. He seems to think it is some sort of heresy. Hi-hi.

As long as we have this nice graph, let me say that an antenna can be fed at any point. However, your transmitter needs a 50-ohm load. So if you choose to feed your antenna at a high voltage (high impedance) point, you must make provisions to transform the impedance to something that your transmitter can deal with. A tuner or matching network can accomplish this task, but you may want to use ladder line instead of coax, to minimize feed line loss. Feed line can also be used for a matching network.

I guess I will now go back to experimentation, and start on my next article.

More later, 73 Jim ki8jd

(Jim has been actively exploring the world of electronics and this is his first article on Basic AC theory)

Several Members have said that the club's newsletter is much too dry, nothing to challenge their minds with. Well, in this issue, we have Jim's first installment on AC theory and here, a mind teaser, so to speak. I'm looking to bring back our trusty Crossword puzzles, just for Hams. But this is for you, so please speak up and let me know if you like this or not.
Instructions: the words listed in the list can be found hiding either vertical, across, backwards or anyway one could put a word. The answer grid is on the next page. Have fun.

Ham Radio Word Search

U C J D C A F Z P N L C W K H
G D V E N O G I O X S P D D Z
W G E C P V N V I K Q T T M Z
S I R N D F I T I W A E E B V
Y F U A I C J M E C L C X S N
L U Q V E L H A V S O H S X E
C C B D W E R X R C T M S A W
U S E A Y G T E X T I I D O O
L W H E B S S J D E X D I C L
G E N E R A L I U D O E P T L
N C L Y U N G G R O A Z O L I
Q U A D E A F J W M T L L N D
L F H S Y K Q N J T F N E H A
C I D O I R E P G O L C W S A
Y D O R P K Q J E C P V B Y W

ADVANCED
COAX
CONTEST
DIPOLE
EXTRA
GENERAL
ICOM
KENWOOD
KEY
LADDERLINE
LOGPERIODIC
NOVICE
QRP
QSL
QUAD
SSB
TECH
YAESU
YAGI

*This puzzle was created at **www.puzzlemaker.com** by Network Solution Developers, Inc.*

IN THE NEWS

IARU REGION III CONFERENCE CALLS FOR MORSE EXAM PHASEOUT

The 11th International Amateur Radio Union Region III Conference ended September 1 by resolving to seek the ultimate removal of Morse code proficiency as an International Telecommunication Union licensing requirement for HF operation. As "an interim measure," the conference agreed to support the reduction of all Morse code testing speeds to 5 WPM.

"IARU Region III strongly supports Morse code as an effective and efficient mode of communication," the resolution said in its preamble. "However, it believes that the position of Morse as a qualifying criterion for an HF amateur license is not relevant to the healthy future of amateur radio."

The resolution urged IARU Region III member societies to seek an interim 5WPM Morse code testing requirement while looking toward eventually eliminating the Morse requirement altogether. "We recommend that, setting aside any previous relevant decisions of earlier Conferences, a policy of the removal of Morse code testing as an ITU requirement for an amateur license to operate on frequencies below 30 MHz be adopted by IARU Region 3," the Conference resolution declared.

CHANGEOVER TO CORES REGISTRATION TO BE TRANSPARENT

When the FCC moves its Taxpayer Information Number/Social Security Number registration system for amateurs from the Universal Licensing System to The new FCC Commission Registration System, the changeover will be largely transparent to users.

Steve Linn of the Commission's Wireless Telecommunications Bureau says once the changeover is in effect, the CORES/FRN system will be linked from the ULS home page, http://www.fcc.gov/wtb/uls. In addition, those already registered in the ULS will--in most cases--still be able to use their ULS password to access CORES.

Amateurs will not have to start signing up in CORES until sometime next year, however, and those already registered in ULS won't have to do a thing.

For now, Linn says hams should simply stick with ULS "TIN/Call Sign" registration until CORES registration becomes mandatory.

(edited from The ARRL Letter
Vol. 19, No. 34
September 8, 2000)

Thinking of them…..

Len Gongalski **N8NEK**, a long time friend and member of MARA, is sick with bone cancer. The treatments he is receiving really hit him hard. Sending him a get well card might just cheer him up. His address is 214 Richards NW Grand Rapids MI 49504.
Andy Gusack **W7PG** another long time friend of MARA's, recently fell and is having a terrible time seeing the dials on his radio. This is caused from the fall and he is wondering if anybody might be able to help him out with this problem.

This is the solution to the word search on page 5

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+ + + D C + + + + N L + + + +
+ + + E + O + + O + S + + + +
+ + E C + + N V + + Q T + + +
+ + + N + + I T I + + E + + +
+ + + A I C + + E C + C + + +
+ + + V E L + A + S O H + X +
+ + + D + + R + R + T M + A +
U S E A Y + + E + T + + D O +
+ + + + B S S + D + X D I C +
G E N E R A L I + D O E P + +
+ + + Y + + G + + O A + O + +
Q U A D E A + + W + + L L + +
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