



# BIG RAPIDS AREA AMATEUR RADIO CLUB



DECEMBER 2003    JANUARY 2004

## MICHIGAN HAMS WIN ANTENNA EXEMPTION VICTORY

Amateurs in Troy, Michigan, scored a major victory for that community's hams November 24 after convincing the Troy City Council to reject the city planning commission's restrictions on the height of Amateur Radio antennas and antenna support structures. A Detroit suburb of some 70,000 inhabitants, Troy boasts an amateur population of more than 225.

"When the time came for a vote, the original proposal of the planning commission was not even considered," reported Hazel Park Amateur Radio Club Director of Instruction Jeff Albrecht, N8WR. Instead, the council voted unanimously to accept the proposal drafted by Mayor Matt Pryor and HPARC President Phil Ode, AA8KR, that calls for an exemption of city regulation for structures up to 75 feet and compliance with federal preemptions regarding Amateur Radio.

The planning commission had proposed to increase allowable antenna and antenna support structure height from 20 to 25 feet but wanted to impose additional requirements and final say on any application.

Local hams originally banded together in August 2002 after HPARC First Vice President Murray Scott, KE8UM, was denied a variance to construct an antenna support structure. The amateurs convinced city council that the planning commission's restrictions would violate PRB-1, the limited federal preemption of local statutes that directs municipalities to "reasonably accommodate" Amateur Radio communication with respect to ordinances regulating antennas and antenna support structures. In their presentation, 10 hams from HPARC and the Utica-Shelby Emergency Communications Association used ARRL's "Antenna Height and Communications Effectiveness" study <<http://www.arrl.org/FandES/field/regulations/local/antplnr.pdf>> and ARRL's Amateur Radio Today CD presentation as part of its testimony. Troy Fire Chief Bill Nelson, KC8IWQ, also testified to the importance of Amateur Radio to his department's preparedness plans.

Council ordered the city manager and city attorney to report back at the December 15 council meeting with an ordinance that would codify Pryor and Ode's proposal. Council further ordered that the ordinance not be subject to planning commission review or alteration. ARRL Newsletter

## NEW GENERAL CLASS QUESTION POOL RELEASED

YOU STILL HAVE TO GET THAT GENERAL CLASS LICENSE WITH THE PRESENT QUESTION BANK BUT GET TO IT NOW! Ed, The Question Pool Committee (QPC) of the National Conference of Volunteer Examiner Coordinators has released a revised and expanded Amateur Radio General Class (Element 3) question pool into the public domain. The new question pool becomes effective July 1, 2004, and must be used to generate all General written examinations administered on or after that date.

"The pool has been expanded to 432 questions," said ARRL VEC Manager Bart Jahnke, W9JJ, a member of the Question Pool Committee, who notes that all sub-elements grew slightly. "The largest increase in questions this time around was in our Operating Procedures and Amateur Radio Practices subelements," he said. The General class question pool does not contain any diagrams or symbols.

The new Element 3 question pool is available on the ARRL Amateur Exam Question Pools Web page at <http://www.arrl.org/arrlvec/pools.html> in Adobe PDF and ASCII text format. It includes all questions and answers relating to Element 3.

ARRL Newsletter

## NOVEMBER'S BREAKFAST IN BARRYTON WAS DELICIOUS

For those who could push themselves away from their Thanksgiving weekend in time to make it to the November Club Breakfast, the food and conversation were well worth the trip to the east side of the county. And from the well satisfied looks and empty plates of those in the picture, no one left the table hungry.

Left to right around the table are Bill Stankey, N8MZB, his wife Elizabeth, Helen Rouman (George, W8OWN) is behind the camera, Jake Spence, K18CK with his mother Lillian, KC8OMJ at the end of the table, Sue

Harris, KC8FYH, Jake's sister Billie Jo Straus KC8WGE, Pat Pennock, W4NKL and her friend Nick.



## NOW FOR THE JANUARY CLUB BREAKFAST:

**DOWNTOWN HERSEY VILLAGE HAS A NEWLY OPENED RESTAURANT;**



**ACTUALLY THE SAME BUILDING BUT DIFFERENT OPERATORS WHO NOW CALL IT ROSIE'S INN. MEET AT 8:30 A.M. SATURDAY JANUARY 3 TO TRY OUT THE NEW FACILITY'S VITTLES.**

**I UNDERSTAND GARY ATTEBERRY, WB8WIA HAS TRIED THE BREAKFAST AND HIGHLY RECOMMENDS IT. COME GET TOGETHER FOR EYEBALL QSOs AND EVALUATE HIS CULINARY TASTE.**

## THE NEXT CLUB MEETING AT A NEW SITE



**The next monthly meeting of the Big Rapids Area Amateur Radio Club will be held at 7:30 p.m. on Thursday: January 8, 2004 at the classroom of the new Big Rapids Department of Public Safety building located at 435 North Michigan Avenue in Big Rapids. The Board of Directors will meet at 6:30 p.m.**

**The new site was negotiated with the city officials who agreed to our meeting there monthly. Our new permanent site has more room alleviating the congestion problem that has occurred in the past. The club has grown and the county meeting room was just too small at times. It's our new home folks! Photo taken on Michigan Avenue facing south west.**

**SEE YOU THERE**

# GETTING TO KNOW YOU

## GREGG MCDANIELD KB8ZSU

People often say "It's a small world", and in this case I believe it's true...

People also say "we don't know our neighbors as we used to". Also in this case it's true. Now what am I talking about? I'm talking about our next "Getting to Know You" Victim, Tim (KC0MDC) Stocklein. You see, while interviewing Tim, I found out that Tim Stoecklein and his wife Kylie live just two doors down from me. What's scary is that he knew where I lived, but I didn't know where he lived. Tim said that Tom and Sue Behler had something to do with it. Hmm, I think I need to talk to them.



Anyway, Tim was born and raised in Ness City Kansas. After graduating from high school, he obtained a Bachelor's Degree from Fort Hays State University in Hays, Kansas. In 2002 Tim graduated from that same institution with a Masters degree in Business Administration and Marketing. While looking for a position in the Recreation field, he applied for a position at Ferris State University and is currently in his second year as an Assistant Director of University Recreation. Hmm, Sounds like a very fun job!

What got Tim interested in amateur radio was the "weather"; he enjoys keeping track of it. Since Tim is from Kansas, an area known as Tornado Alley, he says "the weather down there gets a little more excitable, and Hams located in the state are active in skywarn activities". While the local ham club was small, the members were active in working with the local county and city governments and agencies. Tim wanting to be more involved contacted a professor at the University who provided him with study materials and in no time he obtained his Technician No Code ticket and immersed himself in weather spotting.

After moving to Big Rapids, it didn't take him long to join our radio club and volunteer to be a part of the BRAARC Emergency Preparedness Team and to become actively involved in our other activities.. He is genuinely impressed with the large number of members in our club versus the small number in his Kansas group and, as you know quickly rose to be our current club president.

With his growing interest in amateur radio Tim, in March of this year, went to Grand Rapids where he passed his General Class exam. He fully intends to continue upgrading his license and he now has his eye on the Extra class ticket.

Other hobbies Tim likes are Hunting, Fishing, Kayaking, and Photography. In fact, you may have seen some of Tim's photographs when they appeared on "TV 9 & 10 News" and "WZZM 13 News". You ask photographs of what? What else; the Weather during the weather news presentations.

Last summer Tim said he enjoyed his first Field Day and is looking forward to next year's, and looks forward to meeting even more of the club members there. Plan to be there to work with him on another successful outing.

So this is Tim... Who are you? I'll be calling.

# "SOME ARES/RACES NOTES"

TOM BEHLER: KB8TYJ, MECOSTA COUNTY EC/RO



Our local ARES/RACES program has continued to be quite active over the last few months, and some exciting things are being planned for the future as well. I'd like to take this opportunity to update everyone on the most important details about what we have been doing.



First of all, at our November 13 Emergency Committee meeting, an initial draft of a local ARES/RACES Emergency Operations plan was approved. The plan, which was developed by both Tim Stoecklein and me, is in the process of being revised, in preparation for a final vote at the February 12, 2004 Emergency Committee meeting. Once the final draft of the document has been approved, it will be made available for all to see both in printed form, and on our BRAARC club web site. The plan represents the culmination of several months of work, and should be something about which we can be quite proud. My thanks go out to Tim for his efforts at initial plan formulation, and to the rest of the Emergency Committee members who gave a number of valuable suggestions for improvement.

Speaking of our BRAARC club web site, Thom Durfee (our illustrious web master) has now included a neat web link on emergency and public service communications. The link contains a number of items which should be of interest to any ARES or RACES member, and will be updated significantly as appropriate.

And then, there's the matter of training. I am extremely happy to report that plans are now in place



for a Hazardous Materials Awareness training course for those who need the course for completing their RACES certification under the newly-adopted RACES standards. The course will be given on Saturday: February 28 from 9 a.m. - 3 p.m. in the classroom of the new Big Rapids Department of Public Safety building, located at 435 N. Michigan Avenue in Big Rapids. The course instructor will be Randy Bell, a certified hazmat trainer, from the Big Rapids Fire Division. Stay tuned to local nets, and to later editions of this news letter for more details, including registration instructions for those who would like to participate. In

addition, I currently am working with Dan Dowdy, Mecosta County's Emergency Management Director, to schedule this year's National Weather Service Basic Skywarn Training class for our county. The exact time and date for the course are still unclear, but it seems most likely that the course will occur sometime in early April.

Another ongoing project for our ARES/RACES group has been the creation of a "resource list" of ARES and RACES members. The list includes basic contact information, available equipment, and operating capabilities for each individual. With the help of Tim Stoecklein, an easy-to-complete form has been developed for ARES and RACES members to complete. If you are an ARES or RACES member, and were not at our December BRAARC club meeting to fill out this form, a copy of the form is included in this news letter. Please complete the form to the best of your ability, and return it to either Tim or me for entry onto a computer spreadsheet data file. Once the data file is reasonably complete, it will be sent on to Tom Vandermel, our District 6 Emergency Coordinator, for his records.

Finally, I must again mention our local ARES/RACES net. The net occurs on the 146.74 Big Rapids repeater every other Wednesday evening at 9 p.m. Although the net will be taking a break over the holidays, it will resume in earnest on Wednesday: January 14. If you have any suggestions for ARES and RACES-related topics to be discussed on this net, please contact me via radio, phone, or e-mail.

In closing, I would like to thank everyone for a great ARES/RACES year. Our Ares and RACES programs have continued to grow. You have made my first year as Mecosta County's Emergency Coordinator and RACES Officer quite rewarding, and I look forward to working with all of you in the months ahead as we confront the many new challenges that are sure to occur.

# ARES/RACES RESOURCE FORM

Name: \_\_\_\_\_ Call Sign: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Home: \_\_\_\_\_ Work: \_\_\_\_\_ Cell: \_\_\_\_\_

License Class: \_\_\_\_\_

Check the modes you have the ABILITY to operate on:

FM    RTTY    SSB    Packet    APRS    CW  
 \_\_\_\_\_

Please list equipment and circle band(s) and mode(s) for each piece.

440	220	2	6	10	15	20	40	80	160
CW	FM	RTTY	SSB	Packet	Mobile	Portable	APRS		
440	220	2	6	10	15	20	40	80	160
CW	FM	RTTY	SSB	Packet	Mobile	Portable	APRS		
440	220	2	6	10	15	20	40	80	160
CW	FM	RTTY	SSB	Packet	Mobile	Portable	APRS		
440	220	2	6	10	15	20	40	80	160
CW	FM	RTTY	SSB	Packet	Mobile	Portable	APRS		

Please list antennas that can be used for portable operations and for which bands.  
(ie - Dipole 20m & 10m, 33' longwire)

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Please list power sources that can be used for portable operations.  
(ie - deep cycle batteries, generators, solar panels)

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# A REPORT ON THIS YEAR'S SKYWARN RECOGNITION DAY

## TOM BEHLER: KB8TYJ

On Saturday: December 6, a number of our club members once again ventured out into the snow and cold to participate in the annual Skywarn Recognition Day event. As was the case last year, we traveled to the National Weather Service office in Grand Rapids, where our base of operations was a heated tent adjacent to the weather service building. Specifically, those involved in this year's effort were Tim Stoecklein (KC0MDC), Matthew Trombley (KC8VJR), Thom Durfee (WI8W), Sue Behler (KC8IFP), and myself (KB8TYJ).

In general, Skywarn Recognition Day is co-sponsored by the National Weather Service, and the ARRL. This was the fifth year in a row for the event, and from all accounts I have heard, SRD for 2003 was the biggest and best so far. Amateur stations were set up at a total of 116 National Weather Service offices across the country for a 24-hour period, running from 0:00 UTC through 23:59 UTC on Saturday: December 6. The goal was for the NWS stations to log as many contacts as possible during this time period both from the general amateur community, and from other participating NWS offices. Amateurs themselves also were challenged to see how many NWS stations they could contact, with various endorsements provided by the Weather Service for specific combinations of contacts with NWS stations throughout the country.

The Grand Rapids NWS office station was staffed for the entire 24 hours by a number of groups of hams from throughout the 23-county warning area that is served by that office. Our scheduled operating shift was from 7 - 11 a.m. During these four hours, we made somewhere between 75 and 100 contacts. I operated on 40 meter SSB, with the excellent logging help of WI8W and KC8IFP. Matt and Tim spent some time making contacts on 20 meters using another HF rig, and Tim relieved me from our 40-meter operation toward the end of our shift. I understand that, by the close of the event Saturday evening, well over 300 contacts had been made from the NWS GRR transmitter site.

The folks from the National Weather Service Grand Rapids office, and the hams from the Kent County ARES/RACES group (who provided the needed HF equipment), were quite hospitable throughout our stay. They made us feel truly welcome, and were a real pleasure to work with.

In short, this year's fifth annual Skywarn Recognition Day was a very worthwhile event, and I think it's safe to say that SRD is now becoming a regular part of BRAARC's yearly calendar of amateur radio happenings. Information on next year's event will be provided as it becomes available. Please consider joining us, so you can have as much fun as we did on yet another cold, early December, Saturday morning.



Left, Tom, KB8TYJ and Thom, WI8W, racking up the contacts while Matthew Trombley, KC8VJR and an unidentified volunteer, right, either their ears warm or are pulling a weak one out of the ether.

**ALL AMATEURS, CLUB MEMBERS OR NOT, ARE URGED TO CHECK IN ON THESE NETS TO KEEP CURRENT WITH CLUB ACTIVITIES, IMPORTANT NEWS AND TO MEET AREA HAMS VIA THE AIRWAVES!**

## **BRAARC NETS:**

<b>440 FM NET</b>	<b>443.900 REPEATER</b>	<b>SUNDAY</b>	<b>7:30 P.M.</b>
<b>2-METER NET CW PRACTICE</b>	<b>146.74 REPEATER</b>	<b>MONDAY</b>	<b>8:00 P.M. SLOW SPEED</b>
<b>6-METER FM ROUNDTABLE</b>	<b>52.860/52.360 REPEATER</b>	<b>SUNDAY</b>	<b>9:00 P.M.</b>
<b>2-METER FM NET</b>	<b>146.740 REPEATER</b>	<b>TUESDAY</b>	<b>9:00 P.M.</b>
<b>ARES/RACES FM NET</b>	<b>146.74 REPEATER</b>	<b>ALTERNATE WEDNESDAYS</b>	<b>9:00 P.M.</b>

## **THE BRAARC WEBSITE JUST KEEPS GETTING BETTER**



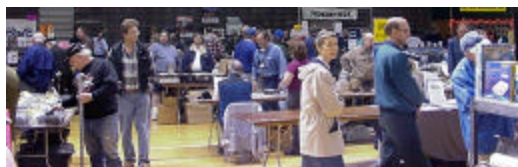
Thom Durfee announces that more improvements have been made to the club website including the availability of the meeting minutes now located in the website's members only section. Those of you who have the capability and have not seen the site lately will find Thom has done a super job of making it friendlier and in adding a multitude of new information and handy ham related sites.

If you don't have capability, sidle up to someone who does and get a good look at it. It will be well worth your time.

## **TECHNICIAN CLASS LICENSE COURSE PLANNED FOR SPRING**

Spread the word that our super Technician course will be taught again in the spring. Plans and details will not be available until a group of instructors has gathered and laid out the program. If you remember, all those who took the course last time passed with flying colors. A sign up sheet was passed around at the last meeting for those interested in helping teach the Technician course and later a General class course. Once established as a group, the instructors will be joined to determine a time schedule and other details. Keep watching the Newsletter for details and start now getting those you know interested in becoming amateur operators.

## **LOWELL HAMFEST:**



January 03 2004 Lowell Youth Group Hamfest at the Lowell High School, from 9 a.m. to 1 p.m. located at 11700 Vergennes, Lowell, MI. Adults \$5.00. Talk-in 146.620 (-) PL 94.8. VE Exams at 10:00 a.m. with walk-ins welcome. Refreshments sold on site.

Contact person: Al Eckman WW8WW, 11700 Vergennes, Lowell MI 49331  
Phone 616-897-4125 E-Mail [AEckman@lowell.k12.mi.us](mailto:AEckman@lowell.k12.mi.us)

## **PUT YOURSELF IN CONTROL**

TOM BEHLER, KB8TYJ, IS LOOKING FOR A FEW MORE MEMBERS WHO WOULD LIKE TO PARTICIPATE IN THE CLUB NETS AS NET CONTROL. IF YOU ARE INTERESTED, CONTACT HIM AT 231-592-9854, ON ONE OF THE NETS OR AT A MEETING.

**THE END OF THE YEAR IS UPON US. IF YOU HAVE NOT PAID YOUR 2003 DUES IT IS ALMOST PAST TIME TO DO IT. PLEASE STICK WITH THE CLUB. IT NEEDS YOUR SUPPORT MORE THAN EVER. TO BE SURE YOU ARE UP-TO-DATE, CHECK THE MAILING LABEL DATE ON THIS NEWSLETTER.**

Call: \_\_\_\_\_ Class: \_\_\_\_\_ Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

E-mail Address \_\_\_\_\_

Dues \$20.00 for 2003 \_\_\_\_\_ \$20.00 for 2004 \_\_\_\_\_ Donation \_\_\_\_\_

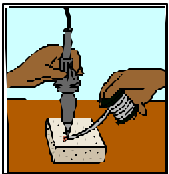
Checks should be made out to the Big Rapids Area Amateur Radio Club.

Mail this form to Sue Behler, KC8IFP, Treasurer, 511 Spring Street, Big Rapids, MI, 49307 or bring your dues to the next meeting.

## ASSISTANT NAMED TO ARRL MICHIGAN SECTION POSITION

Mr. Dan Romanchik, KB6NU, who is treasurer for Arrow Communications Association has been named as assistant to Sandy Mondro, KG8HM, Affiliated Clubs Coordinator ARRL, Michigan Section.

He will be doing special projects related to Michigan club newsletters and will work with newsletter editors. It is an important position within the state organization and we congratulate and welcome him as he takes up his new responsibility.



## TIPS ON SOLDERING

Soldering is the fastest and most reliable way to join metals. Solders generally have a low melting point (less than 800°F and flow into the joint, fusing the parts together. A soldered joint is mechanically stable and electrically efficient. However, solders are not capable of taking a lot of stress or movement. To make a proper solder connection you need: 1) a source of heat, 2) clean metal surface to be joined, 3) a suitable grade of solder, and 4) flux. Rosin core solder - solder with flux impregnated in the core of the solder - will be suitable for most applications. You normally do not need to use any additional flux when using rosin core solder.

Here is the step-by-step procedure for making a reliable solder joint:

Ensure that items to be soldered are perfectly clean. This can be achieved with steel wool or a fine emery cloth. Make a good mechanical connection by wrapping wires around each other or around a terminal. When applying heat, do not apply the solder directly to the tip. Heat the base material so it becomes sufficiently hot to melt the solder and flow it into the joint. A small amount of fresh solder on the tip when you begin soldering will help to carry heat from the iron to the joint. When solder has been applied to the connection, slide the iron away to leave the joint neat. Avoid disturbing the connection while removing the iron. Blowing on the joint will speed cooling. On electrical and electronic components avoid too much heat. A heat sink can be used to dissipate heat away from the component. Don't apply more solder than needed. Excess solder can cause short circuits. It is advisable to pre tin components before soldering, especially stranded wire. Twist the strands together, apply heat and join together using a small amount of solder. To de-solder a joint, apply heat and use a soldering aid like solder wick to remove the solder and separate the joint. Use new solder when re-soldering.

Source: Weller Soldering Iron Corp.

# THOM DURFEE, W18W, ON 2 METERS FROM G.R.

**Thom may now be worked from his home QTH in Wyoming, Michigan 70 miles distant from the BRAARC repeater. It all comes down to the 50 foot tower, antenna and excellent installation procedures by Thom and Jeff Barstow, WD8DLK. While he says the repeater is only slightly above the threshold at his location, he had no trouble copying George, W8OWN who read his signal as "full quieting".**

**Incidentally, the club Board of Directors is looking at the possibility of an evaluation of the range of the repeater in the coming year. Look for more on that subject in the months to come.**

## KID'S DAY IS SUNDAY, JANUARY 4!



Here is your chance to become involved with an activity that does just what you are no doubt wishing to see; youth learning about amateur radio and catching the excitement of on the air contacts. Mark this date on your calendar and do your part by participating in the event and helping to bring youth into our ranks. Read on!

For the first time, Kid's Day will occur on a Sunday. The first 2004 running of this popular operating event will be Sunday, January 4 (the second Kid's Day in 2004 will be Saturday, June 19). Intended to encourage young people--licensed or not--to enjoy Amateur Radio, Kid's Day offers a "mentoring opportunity" for experienced

amateurs while giving youngsters some firsthand hamming experience and perhaps sparking a lifelong interest.

"Kid's Day is an opportunity to introduce your own youngsters, neighborhood kids and nieces and nephews to participate in the magic of ham radio," suggests Jean Wolfgang, WB3IOS, of ARRL Field and Educational Services. Originated by the Boring Amateur Radio Club <<http://jzap.com/k7rat/>>, Kid's Day now is sponsored and administered by the ARRL with BARC's cooperation and assistance. Now entering its tenth year, each running of Kid's Day typically attracts more than 1000 participants.

Kid's Day is not a contest, and patience is the byword on both sides of each contact. The role of the licensee and control operator is to help youngsters with the basics, keep an eye on the technical aspects of the operation, observe third-party traffic restrictions <<http://www.arrl.org/FandES/field/regulations/io/3rdparty.html>> when making DX QSOs and ensure station identification at proper intervals. In this event, it's quality of the contacts that counts, not quantity.

Kid's Day will run from 1800 to 2400 UTC, and there's no limit on operating time. The suggested exchange is name, age, location and favorite color. Stations may work the same station again if an operator has changed. Call "CQ Kid's Day."

Suggested frequencies are 14.270-14.300, 21.380-21.400 and 28.350-28.400 MHz plus 2 meter repeater frequencies, with permission from the repeater's sponsor). Guidelines for this event are available on the ARRL Web site <<http://www.arrl.org/FandES/ead/kd-rules.html>>.

All participants are eligible to receive a colorful certificate. Visit the ARRL Kid's Day Survey page <<http://www.arrl.org/FandES/ead/kids-day-survey.html>> to complete a short survey and post your comments. You will then have access to download the certificate page. Or you can send a 9x12 SASE to Boring Amateur Radio Club, PO Box 1357, Boring, OR 97009.

Kid's Day participants are invited to post logs and comments on the Internet <<http://lists.contesting.com/pipermail/kids/>>.

# INTERNATIONAL MORSE CODE GETS NEW ITU HOME AND A NEW CHARACTER

The 2003 World Radiocommunication Conference (WRC-03) may have eliminated the treaty requirement for prospective amateurs to demonstrate Morse code proficiency to gain HF access, but the International Telecommunication Union (ITU) hasn't forgotten Morse code altogether. In Geneva on December 5, the ITU Radiocommunication Sector (ITU-R) Study Group 8 agreed on the wording of a Draft New Recommendation ITU-R M.[MORSE] that specifies the international Morse code character set and transmission procedures. It also includes a new Morse code character to cover the "@" symbol used in e-mail addresses.



Once it's made available in English, French and Spanish, the draft new recommendation will go out to ITU member-states using a new procedure for simultaneous adoption and approval. On December 3, the draft new recommendation won the approval of Working Party 8A, which is responsible for the Land Mobile and Amateur services.

Within the ITU, the international Morse code has been defined by the Telecommunication Standardization Sector (ITU-T), which is responsible for the public telephone and telegraph network--mostly landline. A couple of years ago, the ARRL pointed out to the US delegation to the ITU Radiocommunication Advisory Group that Morse code's role more properly resides in the radiocommunication realm, not wire, and should be the responsibility of ITU Radiocommunication Sector (ITU-R).

The transfer was agreed to, and International Amateur Radio Union (IARU) President Larry Price, W4RA, proposed the draft new recommendation at the November-December Working Group 8A meeting. The draft new recommendation is almost unchanged from its ITU-T text.

"No one wanted to disturb something with more than 150 years of history," said ARRL Technical Relations Manager Paul Rinaldo, W4RI.

To keep up with the times, however, the IARU proposed adding a new character--the commercial "at" or @ symbol--to permit sending e-mail addresses in Morse code. The draft new recommendation proposes using the letters A and C run together (.-.-.) to represent the @ symbol.

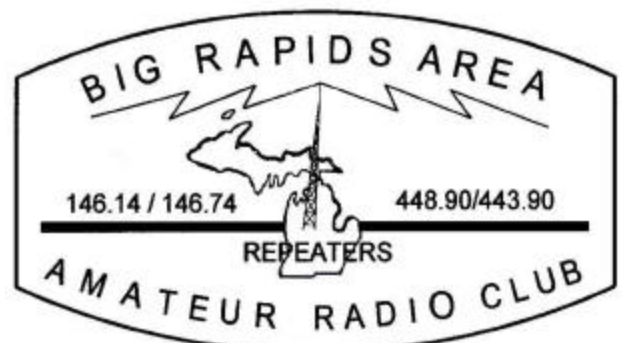
While the draft new recommendation is still a working document, it's expected to become a Recommendation within six months or so, pending approval by member-states.

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May your new year be filled with health, happiness and rare DX.

**DON'T FORGET: THE NEXT MONTHLY CLUB MEETING IS AT A NEW SITE – SEE ARTICLE.**



P.O. BOX 343, PARIS, MI 49338