

Mich-A-Con RF

Iron Mountain, Michigan

June 2004

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Visit the ARRL's web site at:

<http://www.arrl.org>

Let's Do Field Day!

Field Day 2004 is just a few days away. If you haven't yet decided to participate, please notify Tom, W8JWN, now and join in the fun! Or, if you have a few spare minutes during the weekend stop in for a visit.

For the hardware junkies, here's a rundown of the equipment we plan to use at each station :

SSB Station:

- Rig: Icom 706MKIIG, 100 watts (will also be used to demonstrate RTTY and PSK31)
- Antenna: Carolina windom
- Power Supply: Emergency generator

CW Station:

- Rig: Ten Tec Argonaut V, 20 watts
- Antenna: G5RV tuned with a LDG-Z11 auto tuner.
- Power Supply: Emergency generator

Solar Power Station (100 bonus points):

- Rig: Sierra QRP transceiver kit, 5 watts
- Antenna: 44 foot doublet supported by two 20 foot telescoping fishing poles and tuned with an Emtech ZM-2 QRP tuner
- Power Supply: 7 ampere hour gel cell charged by a 10 watt solar panel.



This is the QRP station that will be set up for Field Day. It will be powered by a gel cell and solar panel so that we can claim the 100 bonus points for using "natural power."

GOTA Station:

- Rig: Icom 701, 100 watts
- Antenna: dipoles for 80, 40 and 20 meters
- Power Supply: Emergency generator

All stations will be equipped with laptop computers running N3FJP's logging software. Additionally, the SSB station will be using Logger32 software for digital modes.

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Mich-A-Con ARC June 8th Meeting

The meeting was called to order by President, Tom Martin W8JWN, at 6:36 PM

Secretary Report:

The minutes of the May 11 meeting were read by Mike, K8DDB, and accepted.

Treasurer Report:

The Treasurer's Report was presented by Steve, KC8RYY. As of this meeting, we have \$398.75 in

checking, \$2,326.20 in the savings account, \$1,508.61 in the repeater account and \$12.00 in petty cash.

Repeater Report:

The repeater antenna was replaced on May 15th with a shorter dual bander good for 130 mph winds. Some noise was heard on a rainy day during the Memorial Day weekend, but it's been

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Words from the President

As I think back over the many years of being a ham, several events stand out as being highlights of my amateur radio activity. Working North Korea, number one wanted DX entity for most DXers, building a 10-15-20 meter quad and having it work like gangbusters, getting zapped by 2000 volts and living to tell about it, climbing a 70 foot tower in the dark, and the most recent, passing the Extra Class on the third try! These events, though, are solitary occurrences.

One of the best "group" memories was operating from Mario Marriuci's camp on a Field day weekend back in the early 1970's. It was a fun time: antenna building with Harold (W8CON), rig repair with Burt (WB8EBS), 160 meter setup with Lee (N8LT). There was a camaraderie that weekend in the woods off the Well's Grade Road. I hope to have the same enjoyable experience (minus the rig repair!) in two weeks with some new names and faces during Field Day 2004.

Buy-Sell-Trade

For Sale

- Globe Matcher SR. Model AT-4 antenna tuner.
- Cantenna dummy load.

Make an offer, or will trade some or all of the above for a good scanner. Need a good base with lots of coverage! Or???? Please email me with any questions/offers.

Fuzzy LeQuia fdlequia@up.net

For Sale

- Dentron 160-10 AT antenna tuner. It will handle 600 watts easily. No meters. \$60
- Radio Shack 10-meter 25 watt mobile/fixed transceiver HTX-10. Like new condition, works great. \$75.00

Tom Martin, W8JWN (906)774-5463

For Sale

- Yaesu FT-201, with manual.
- Heath Kit SB-630 Station Console, (contains Phone Patch, 24hr Clock, and SWR Bridge), with manual.
- Heath Kit Model HM-15 SWR Bridge, with manual.
- Mosley TA-33 Beam antenna, (20, 15, 10 meters) with instruction sheet
- Cushcraft 2 Meter Beam, with instruction sheet.
- CDR Model CD-HAM II rotor, with controller and instructions
- 40 Foot Tower.
- Outercom Electronics Model FM-50A, converted to 6 meters, crystal frequency unknown.

\$500 for all of the above.

Don Schettler, WA8AYG (906)774-4377

Club Activities in July

Club Net on Tuesday the 6th, 20th and 27th at 6:30 PM on the 2-meter repeater.

Club Meeting on Tuesday the 13th at 6:30 PM.

Upcoming Events:

UP Hamfest

August 7, 2004

Bay-de-Noc

Community College
Escanaba, Michigan

Contests

Canada Day Contest
0000 to 2359 July 1

MI QRP Club
July 4 CW Sprint
2300 July 2—0300 July 3

IARU HF
World Championship
1200 July 10—1200 July 11

FISTS Summer Sprint
1700 to 2100 July 10

QRP ARCI
Summer Homebrew Sprint
2000—2400 July 11

North American
RTTY QSO Party
1800 July 17—0600 July 18

World-Wide Mid Summer
Six Club Contest
2300 July 16—0300 July 18

CQ WW VHF Contest
1800 July 17—2100 July 18

CQC Great Colorado
Gold Rush
2000 to 2200 July 18

RSGB Islands On The Air
Contest
1200 July 24—1200 July 25

Russian RTTY WW Contest
0000 July 24—2400 July 25

Flight Of The Bumblebees
1700 to 2100 July 25

Contest dates are UTC
see the ARRL web site
July Contests or July QST
for more information:

<http://www.arrl.org/contests/>

Mich-A-Con ARC Activities - July 2004

SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6 Net	7	8	9	10
11	12	13 Meeting	14	15	16	17
18	19	20 Net	21	22	23	24
25	26	27 Net	28	29	30	31

License Study Materials Available from the ARRL:

Technician Class:

Now You're Talking - 5th edition - Order No. 8810 \$19.95

ARRL's Tech Q&A - 3rd edition - Order No. 8829 \$12.95

ARRL Technician Class Video Course - 4th ed. DVD Course No. 9116 VHS Course No. 8837 \$149 each + \$12 s&h

General Class:

ARRL General Class License Manual - 5th ed. Valid beginning July 1, 2004 - Order No. 9205 \$16.95

ARRL's General Q&A Valid beginning July 1, 2004 - Order No. 9213 \$12.95

ARRL General Class Video Course Order No. 8349 \$149 + \$12 s&h

Your Introduction to Morse Code - Pass 5 wpm test Cassettes No. 8322 Audio CD No. 8314 \$14.95 each

Ham University - Complete Edition - Learn Morse code with this easy to use software. Includes a written exam quiz generator with all three question pools. CD-ROM for Win95-XP Order No. 8735 \$39.95

Phone: 1-888-277-5289
or

<http://www.arrl.org/catalog/lm/>

<http://www.arrl.org/catalog/8330/>

<http://hamuniversity.com>

Let's Do Field Day!

(Continued from page 1)

Operators are scarce! Here are the operators that have signed up so far: Tom, W8JWN, will be the operator of the SSB station, with Mike, N9NBN, as a relief for Saturday evening. Mike, K8DDB, will be the operator of the CW and Solar Power Station. Lee, N8LT, will be the operator of the GOTA station Saturday afternoon. We would love to have more people involved—notify Tom if you can help!



Field Day 1999, the club's most recent Field Day effort.

Operators for the GOTA station (under the direction of Lee, N8LT) can be any Technician or novice licensee, any licensed Ham that hasn't been active for the past two years or any unlicensed person. So, if you have a relative, friend or family member that would enjoy getting on the air, bring them by!

Set up will begin 8 AM Saturday and is expected to be complete by noon. Operation will begin at 1 PM Saturday and go until 1 PM Sunday. Terry's motor home (with air conditioning) will be available, so we can move inside if the bugs are bad or if the weather is too hot. That's roughing it, eh!

The City of Norway has proclaimed the week of June 21 through 28 Amateur Radio Week. Fliers have been posted around the community and press releases have been sent to The Daily News and to WLUC-TV6 with hope of attracting visitors to our Field Day operation.

The club gratefully acknowledges contributions from the following area businesses:

- The City of Norway for the use of Marion Park and for proclaiming June 21 through June 28 Amateur Radio Week.
- LaFaive Oil for supplying fuel for our

emergency generator.

- Subway of Norway for sub sandwiches.
- Ebeling's IGA Super Market for food and soft drinks.

Field Day Bonus Point Q & A:

Q. What equipment at our Field Day site must be operated from emergency power to claim the 100-points per transmitter bonus?

A. You must operate all transmitting and receiving equipment from emergency power. If you use a computer to control or operate the transmitter, it also must use emergency power. If the computer is used only for logging and is not keying the transmitter, it does not need to be emergency powered.

Q. PSK31 is a new mode. May we do a demonstration of it and claim a 100-point bonus for demonstrating a non-traditional mode?

A. No. You may not claim a demonstration bonus for a mode for which you can earn regular QSO credit. Since PSK31 counts for Digital QSOs credit, it may not be a demonstration bonus.

Q. We sent a press release to the local TV station, but they didn't send a crew out to cover our operation. May we still claim the Media bonus?

A. Yes. In order to claim the media bonus, you must only attempt to obtain publicity.

Q. What kind of "proofs of bonus points" do we need to send?

A. It depends on which bonuses you claim. For emergency power, public location, public information table, satellite QSO, alternate power, and non-traditional modes, a signed statement from a club official attesting to the fact is sufficient. Copies of the NTS message to the Section Manager, any NTS messages sent or received, the W1AW message, and any press releases (or copies of the story if your local media actually runs a story) must be included. If an official from a served agency and government official visits the site, a copy of your invitation as well as a statement that they did visit the site (signed by a club official) is sufficient.

LET'S DO FIELD DAY!

(Field Day is always held on the 4th full weekend in June. This year it's the weekend of June 26th and 27th.)

GIVING FM SIGNAL REPORTS

FM (for Frequency Modulation), developed by E. H. Armstrong in 1936, was intended to circumvent the natural and man made electrical noise problems plaguing reception of AM (Amplitude Modulation) broadcasting. Rather than varying the amplitude of the transmitted signals carrier wave to impress the program audio as in AM, FM impresses the audio on the carrier wave by varying its frequency, leaving the carriers amplitude constant. The idea was to create a signal whose reception was insensitive to variations in signal strength, thus, allowing FM receivers to remove noise interference which is largely amplitude varying. FM receivers accomplish this by using limiters; amplifier stages so overdriven by the received signal that they simply clip off virtually all amplitude variations caused by noise and signal strength variations (like clipping a ragged hedge to a smooth uniform flat top), and then following that with a detector that is sensitive to frequency variation to recover the broadcast audio.

As a result of the nature of FM and its reception, giving signal reports on FM becomes a whole 'nother matter compared to AM. True, some FM radios have a signal strength indicator or S-Meter, but frankly, their limited signal strength range and the fact that they vary so much from radio to radio makes their indication of little use except, perhaps, to indicate relative variations in the strength of weak signals.

IT'S ALL ABOUT NOISE

Since FM receivers are not sensitive to signal strength, and their S-Meters (if they have one) are relatively useless, how are you supposed to give signal strength reports? Ever hear a report given like "You're about 20 dB of quieting..." or "You're full quieting..."? Ever opened the squelch of your radio and been greeted with a loud blast of noise? That loud hiss or rushing noise, something like the sound of a water fall, is called "white noise" (pink noise to the purist). FM receivers are very noisy when no signal is present because they have a very large excess of gain to ensure that even the weakest received signals are sufficiently amplified to be heavy amplitude clipped in the limiter stages. As a result, the tiny amounts of noise generated by the early stages of the receiver are amplified to full volume and sound like a 100% random-noise modulated signal.

Fortunately, limiters have a characteristic called "quieting". The stronger a received signal is the more it tends to reduce the background noise present with the signal. This is easily demonstrated by turning down the squelch control of your receiver until the squelch opens and then tuning in a signal. The stronger the signal the lower the background noise level drops. Have enough signal strength and the background hiss completely disappears, hence, "full quieting". So, what's this 20 dB of quieting stuff?

Many, many years ago, Alexander Graham Bell, who was a teacher of the deaf, studied hearing and realized that the human ear does not sense the loudness of sound in proportion to its actual intensity but rather in proportion to the logarithm of its intensity. So, he decided to invent a unit of measurement that measured the differences in sound intensity logarithmically as the ear did. He called his unit of measurement the Bel (what a coincidence). The Bel is defined as the base ten logarithm of the ratio of the intensity two sound levels. Since the Bel is a rather large unit the prefix deci- (meaning 10ths) is usually attached, hence, the deci-Bel or dB (in fact, no one uses the Bel). Incidentally, one dB is about the smallest difference in loudness the ear can detect. This same measurement system has been carried over into electronics where it is applied to the ratios of voltage, current, and power. (The dB has the advantage of being able to compare different levels without having to actually specify the levels and it can also easily describe very large differences with relatively small numbers. For example a power ratio of 1,000,000 to 1 is only 60 dB.) Now, add quieting. We can easily measure the difference in sound level coming from the speaker of an FM receiver between a no-signal condition and when a signal is present. By representing the difference in dB we have a meaningful measurement, independent of volume control setting, of how much the noise decreases with the presence of a signal compared to when it is absent. For many years the standard method of specifying FM receiver sensitivity was to specify the signal strength in microvolts required to produce 20 dB of quieting with no modulation present. Twenty dB of quieting represents a 100 fold decrease in noise level which, to the ear, sounds like about a 10 fold decrease and would represent a signal accompanied by a significant amount of noise but at a level well below that which would interfere with reception. Thirty dB of quieting would be an easily detectable but low level of background noise. Full quieting is, of course, no background noise. In good receivers a small change in signal strength can make a big difference in background noise, a fact that Fox (hidden transmitter) Hunters exploit to good advantage.

Note here that we are talking about that background hiss, or white noise, discussed above and not interference of some sort, whether natural or man made.

MORE POWER DOESN'T MAKE YOU LOUDER

If your signal is noisy, increasing power doesn't make you louder; it makes the background noise quieter! Talking louder or moving closer to the microphone may make you louder; but not quieter. That's because FM depends upon frequency shifting not signal strength to determine loudness, remember? It depends upon signal strength to lower the background noise. This characteristic makes FM a poorer mode for weak signal work than amplitude modulated modes like CW

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Storm Spotting

Even with Doppler weather radar and advanced weather satellites, there is a need for storm spotters. The radar and satellites help meteorologists detect storm features often associated with severe thunderstorms and tornadoes, but radar and satellites do not by themselves provide ground-based reports of cloud features, hail size, thunderstorm wind speeds, and tornado touchdowns. Storm spotters provide emergency managers and weather forecasters with these vital, real-time observations of tornadoes, hail, damaging wind, flooding and winter storms.

Reporting Procedures:

The following events should be reported using the toll-free phone number below:

- Tornado or Funnel Cloud
- Wall Cloud: rotating, non-rotating
- Hail: Any size
- Wind Damage: Trees and branches broken (give diameter), structural damage, etc.
- Heavy Rain: 1" or more per hour
- Heavy Snow: 1" or more per hour, accumulations of 2" or more
- Flooding: Water over roadways, streams/rivers rising to 1 ft. of bank-full, over bank-full, flood damage

Call: 1-800-828-8002 and give the following information:

- Who: Name/Spotter ID
- What: Is happening
- Where: Event is occurring
- When: Did event start/end - include time zone

Weather Radio Stations:

<u>Location</u>	<u>MHz</u>	<u>Transmitter Power</u>
Escanaba	162.500	1000 watts
Marquette	162.550	300 watts
Sister Bay	162.425	500 watts
Wausau	162.475	1000 watts
Wausaukee	162.400	1000 watts

Helpful Web Sites:

National Weather Service in Marquette: <http://www.crh.noaa.gov/mqt/>

NEXRAD Doppler Radar: <http://www.intellicast.com/Local/USLocalWide.asp?loc=kmqt&seg=LocalWeather&prodgrp=NEXRADimagery&product=BaseReflectivityLoop&prodnave=none&pid=none>

600-Mile Doppler Radar: http://www.weather.com/weather/map/USMI0426?name=index_large_animated&day=1

The Weather Channel: <http://www.weather.com/weather/local/49801?lsw=49801&lwsa=WeatherLocalUndeclared>

Mich-A-Con ARC SKYWARN Web Page: <http://www.qsl.net/ka1ddb/skywarn.html>

Area Repeaters

<u>LOCATION</u>	<u>OUTPUT</u>	<u>OFFSET</u>	<u>PL TONE</u>	<u>CALLSIGN</u>
Abrams	146.835	minus	107.2	KB9DSV
Bessemer	146.760	minus	none	K8ATX
Calumet	147.315	plus	100	K8MDH
Crivitz	145.470	minus	107.2	K9ARF
Escanaba	147.150	plus	none	K8ZAS
Green Bay	147.360	plus	none	K9EAM
Gwinn	146.640	minus	none	N8RRZ
Hancock	146.880	minus	100	W8CDZ
Herman	146.670	minus	none	W8CDZ/RPT
Iron Mountain	146.850	minus	none	WA8FSQ/R IMT
Iron Mountain	444.850	plus	100	WA8FSQ/R IMT
Iron River	145.170	minus	107.2	N8LVQ
Iron River	444.175	plus	none	N8LVQ
Ishpeming	146.910	minus	none	K8LOD
Manistique	146.790	minus	none	KD8DD
Manistique	146.700	minus	?	WA8WG
Marquette	147.270	plus	none	N8RY
Marquette	146.970	minus	100	KE8IL
Marquette	444.800	plus	100	KE8IL
Menominee	147.000	plus	107.2	W8PIF
Menominee	444.075	plus	none	W8PIF
Munising	145.410	minus	none	K8KIT
Republic	147.090	plus	none	KG8ZL
Republic	444.200	plus	none	N8PUM
Stephenson	147.330	plus	none	K8NB
Wausaukee	146.880	minus	136.5	WA8WG
White Pine	147.300	plus	none	N8JUP
Winona	146.730	minus	none	W8UXG

Club Equipment List

Hey, we're making progress with the club equipment list but please take the time to look through your "stuff" and see if you have anything belonging to the club.

Here's what we have so far:

Tom, W8JWN, has custody of a Jin Pole with 100 feet of rope (the pole is made for a Rohn tower); dipoles for 80 meters, 40 meters and 20 meters; an antenna rotor w/control box; extra coax.

Bob, WA8FXQ, has custody of a light 40 foot tower (condition is not known.)

The list can be accessed by a link on the Membership page of our web site:

<http://www.qsl.net/ka1ddb/>

If you have custody of any club equipment, please notify Mike, K8DDB, of what you have. Also, notify Mike when you give custody of the equipment to another member.

Email: mikebray@chartermi.net
or
Phone (906) 563-7020

Field Day Safety

George K5KG offers some timely safety ideas when using any kind of a line-tethered "launcher". "(1) I never use the launcher without a leather glove on the left hand and a full face shield (kind used by woodworkers), and (2) I use a closed-face fishing reel which is much less prone to line snags."

This is excellent advice, no matter how good you are in the use of such things, even the tried and true Armstrong Method. All it takes is one "oops" and whatever is tied to the end of the line makes a quick 180-degree turn and heads right back at whatever launched it. And that would be you.

The above article was taken from The ARRL Contest Rate Sheet for June 16, 2004.

Mich-A-Con ARC June 8th Meeting

quiet other than that occurrence. Cable clamps which secure WE Energies antenna feedlines to the tower were found to be loose and were tightened using nylon cable ties as a temporary measure. The loose cables were thought to be a source of the repeater noise. Skip, KE9L, will ask WE Energies if they will make repairs when regular tower maintenance is scheduled.

Old Business:

Mike, K8DDB, solicited a 2-meter net control operator, but the candidate respectfully declined due to health reasons. He may reconsider when his health improves.

Tom, W8JWN, presented the status of Field Day planning. Tom, W8JWN; Lee, N8LT; Terry, KB9ZER and Mike, K8DDB met at Marion Park prior to the meeting and determined that there should be no problem with erecting antennas and locating Terry's motor home next to the small pavilion. The City of Norway will issue a proclamation for Amateur Radio Week for the week of June 21 through 27. A press release has been given to WLUC-TV6 today and one will be given to The Daily News a week before Field Day. Tom, W8JWN, and Mike, K8DDB, set up radio operations at Marion Park on June 7th as a test run for Field Day. It was apparent that something will have to be done to control the amount of interference between radios operating on different bands.

New Business:

Skip, KE9L, said that putting on a "Brat Feed" at Econo Foods would be a good fund raiser for the club.

Coax stub traps will be needed to reduce the inter-station interference during Field Day.

The following expenditures were approved by those in attendance:

- \$6.00 to register N3FJP's Field Day Software for the club callsign. Mike, K8DDB, was given \$6.00 from the club's petty cash to do so.
- An as yet undetermined amount of money to purchase coax, tees, support line, etc., for Field Day. The material will be purchased from Tower Electronics in Green Bay and Radio Works.
- \$50.00 in cash for food for Field Day.

A PayPal account will be set up by Steve, KC8RYY, for ease of payment of future club purchases.

Steve, KC8RYY, gave Tom, W8JWN, a box of supplies belonging to the club. The box contained dipoles for 80, 40 and 20 meters, additional coax, and an antenna rotor and control box.

Lee, N8LT, mentioned that Bob, WA8FXQ, has a light 40 foot tower belonging to the club but was unsure of its condition.

Adjournment:

The meeting was adjourned at 7: 30 PM

Submitted by: Mike Bray

Attendees:

Mike Bray, K8DDB (Secretary)
Mike Boileau, N9NBN (Vice President)
Skip Caswell, KE9L
Cliff Haycock, KD4ZBP (visitor)
Tom Martin, W8JWN (President)
Steve Johnson, KC8RYY (Treasurer)
Lee Michaud, N8LT

Club Membership

Of the twenty-eight members that paid dues in 2003, twenty-one have renewed their membership. May 11th was the deadline for the payment of dues. Those that didn't pay were dropped from the active membership list and will no longer receive correspondence via regular mail. Former members with an up to date email address will, however, continue to receive email as there is no cost to the club to do so.

We were able to attract thirteen new members to the club this year and we are seeking more. A single issue of this newsletter is being sent to a new local Ham every month in an effort to increase club membership. Please pay us a visit at one of our monthly meetings or just complete the application/renewal form on page 9 to become a member.

FM SIGNAL REPORTS

(Continued from page 4)

(Continuous Wave, i.e., code), SSB (Single Sideband), and AM (Amplitude Modulation).

REPEATERS, A SOMEWHAT DIFFERENT BALL GAME

When we talk through a repeater things get more complicated. Now we're talking about two receivers, yours and the repeaters, both of which have noise and experience quieting. Here you're not listening to the other stations signal directly but a reproduction of it transmitted by the repeater. Your signal strength (S) meter isn't indicating the other stations signal strength at all, it's indicating the signal strength of the repeater! (And the repeaters signal strength is not in any way affected by the signals it receives.) It's still possible to judge the other stations signal to give a report but you must remember that the report will have to be how the other station is getting into the repeater, not how your hearing it. If you are not hearing the repeater perfectly (the repeater is not full quieting or there's some interference) you must take that into consideration.

The trick is separating the differences between the two signals. When a station using the repeater stops transmitting the repeater receiver squelch closes but the repeater continues to transmit for a few seconds (called hang time) before shutting down. During the hang time there is no retransmitted audio from the repeaters receiver and any noise you hear on the repeater signal is the result of your reception of the repeater. The same condition is true during the repeater's automatic identification if no repeater-received signal is present. Any noise heard on the repeater during the hang time will be added to the noise, if any, that the repeater has on the other repeater user's signal. If the repeater is full quieting at your location, then all the noise heard with the other repeater user's signal will be a direct indication of how well or poorly the repeater is hearing the other user and your report can be made the same as if you were operating "Simplex" (without a repeater). If your reception of the repeater is noisy you must mentally subtract that noise from any noise you perceive on the other repeater users signal to make a judgment. If your reception of the repeater is marginal or poor you may not be able to give a reliable report to the other station.

A COUPLE OF SLANG TERMS YOU MAY HAVE HEARD

Fry: When a small amount of noise accompanies a signal some people refer to it as "fry", presumably due to the similarity of the noise to the sound of frying.

Picket Fencing: A rapid flutter heard on a moving mobile, often alternating between quiet and noisy, caused by signal multipath. That is, the repeater is hearing both a direct signal from the mobile and a reflection of the mobile's signal. Since the length of the two signal paths is slightly different and constantly varying the signals alternately add and subtract at the repeater antenna causing rapid signal fades and peaks. Handheld radios also suffer from this effect which is why moving such a radio just as little as a few inches can sometimes make the difference between a good signal and no signal.

That's the essentials of signal reports; You're full quieting here OM... .

N8LT

Accident Reported Via Club Repeater

On the morning of June 16th, Mark, N8XZB, used the Mich-A-Con Amateur Radio Club's 2-meter repeater to report an accident in Florence County Wisconsin. A vehicle traveling on County Road U failed to negotiate a curve, went off the road and came to rest in the front yard of a residence. The driver was not seriously injured.

Mark used the auto-patch to access the 911 operator and informed her of the accident and requested the assistance of the County Sheriff. Mark's report was clear and concise and he used excellent radio procedure. Great job!



See the buy-sell-trade page on the club web site:
<http://www.qsl.net/ka1ddb>

Club Apparel:

Our club apparel is supplied by:

Shirt Tails
408 S Stephenson Ave.
Iron Mountain, MI 49801

Phone: (906)774-3370
or
finleyd@up.net

Prices:

Jacket with liner \$45
(Tall add \$5, 2X or 3X add \$5,
to add your name or call sign
on the front is \$5)

T-Shirt - \$10
(2X or 3X add \$1)
Sweatshirt - \$16
(2X or 3X add \$2)

If you wish to have the club logo printed on an item of clothing that you have purchased elsewhere, there is charge of \$6.

Club patches are available from:

Steve Johnson, KC8RYR
917 Coolidge Ave
Kingsford, MI 49802

They are 3 inches in diameter and sell for \$3.00 each. If ordering by mail, please include a SASE along with your payment.

Mich-A-Con Amateur Radio Club
Membership Application/Renewal Form

Please remit dues to club treasurer:
Steve Johnson, KC8RYY
917 Coolidge Ave
Kingsford, MI 49802

Name: _____
Address: _____
City, State, Zip: _____
Call Sign: _____
Email Address: _____
Phone: _____

ARRL Member? Yes _____ No _____

Single \$20 _____ * Family \$30 _____ *

If family membership, please list additional names and call signs:

* The dues for NEW members are prorated - you only pay for the remainder of the year! Please remit \$1.67 per month for a Single membership or \$2.50 per month for a Family membership.

Exam Schedule

City: Iron Mountain
Location: Dickinson County Library
Room: Conference Room
Time: 9:30 AM Central Time
Contact: Mark Lewis, N8UKD
Telephone: (906) 774-6598

Exam Date: Aug 7, 2004
Exam Date: Nov 6, 2004
Exam Date: Feb 5, 2005
Exam Date: May 7, 2005

Examinees should bring 2 pencils, a pen for the official paperwork, the originals AND copies of any previous credit that you have earned (Certificates of Successful Completion or current license), 1 photo id (usually a driver's license) and 1 other id. (usually a birth certificate or SS card), a calculator if needed (make sure your memories are cleaned out), and the test fee (2004 fee is \$12).

Mich-A-Con RF is published by the Mich-A-Con Amateur Radio Club of Iron Mountain.

Items for Mich-A-Con RF should be in the editor's hands by the first week of the month to be included in the next edition.

Our newsletter needs contributions from the membership to help keep the information presented each month new, interesting and fun to read. Please consider writing an article related to Amateur Radio to share with your fellow members. Send the article in plain text and attach any photos, etc., don't worry about format, that's the editor's job.

Send to:
mikebray@chartermi.net
(906) 563-7020

Repeaters

The club maintains two repeaters, which are located on Pine Mountain in Iron Mountain, with tower and facilities provided by the Wisconsin Electric Power Co.

Identifier: WA8FXQ/R IMT

Output	Offset	PL Tone
146.850 MHz	minus	—
444.850 MHz	plus	100

Both repeaters have an auto patch with a toll restriction. The auto patch on the 2-meter repeater can be used with permission. The 440 auto patch is for club use only.

A club net is held on the 2-meter repeater every Tuesday at 6:30 PM except the 2nd Tuesday of the month, which is club meeting night.

Mich-A-Con RF

Mich-A-Con ARC
c/o Michael F. Bray
W3821 Waucedah Road
Vulcan, MI 49892-8483

Mich-A-Con RF

Club Meetings

The Mich-A-Con Amateur Radio Club meets on the second Tuesday of the month at 6:30 PM in the Grace United Methodist Church (upstairs in the room next to the sanctuary), 721 Norway Street in Norway, Michigan. Visitors and prospective members are always welcome!

The URL for the Mich-A-Con ARC web site is:

<http://www.qsl.net/ka1ddb/>

Previous editions of Mich-A-Con RF can be accessed by a link on the news page.

The ARRL DX Bulletin on the Upcoming Activities page is updated each Thursday and the contests section is updated on a monthly basis.

CLUB OFFICERS

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Reminders

Don't forget that meetings are now held on the second TUESDAY of the month at 6:30 PM (upstairs in the room next to the sanctuary.)

Field Day participants are asked to meet at Marion Park at 8:00 AM, Saturday, June 26, to set up for Field Day.

PLEASE call Tom, W8JWN, and let him know what role you want to play in Field Day 2004.

If you have custody of any club equipment, PLEASE notify Mike, K8DDB, of what you have.