

Mich-A-Con RF

Iron Mountain, Michigan

January 2007

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Visit the ARRL's web site at <http://www.arrl.org>

HOW'S YOUR MICROPHONE TECHNIQUE?

Submitted by:

Lee, N8LT

Ever notice how some stations have audio so low you have to turn the volume way up on your radio to hear what they're saying while others seem to come booming through so loud they practically blow you away, making you reach for the volume control to turn it down? How you use your microphone can have a big affect on how you sound on the air and can significantly affect how well you are able to communicate.

PRINCIPLES

To communicate using radio waves we must impose upon them the information we wish to send. This process is called "Modulation". The most common forms of modulation are Amplitude (AM) and Frequency (FM). In AM, modulation is accomplished by varying the strength or "amplitude" of the "carrier" or transmitted signal, while in FM it is the carrier frequency that is varied instead. In FM, the amount that the carrier frequency is varied (shifted) with modulation is called the "Deviation".

FM is the most common voice mode used on VHF today. In FM transmission the degree of modulation (deviation) does not affect the strength of the signal you transmit; that remains constant regardless of how loudly or softly you speak, or even if you're not speaking at all (no modulation). However, even though modulation doesn't affect the strength of your signal, it determines how loud you sound, your readability, and your ability to get through under less than ideal conditions.

THE MICROPHONE

Your microphone is a key component interfacing you to your radio. It converts the sound of your voice into an electrical signal that is imposed upon (modulates) the signal you transmit. The strength of the audio signal generated by a microphone (and hence, your transmitted modulation level) is dependent upon the loudness of the sounds entering it. How loud your voice sounds coming from the receiver speaker at the other end is dependent, in part, upon how loud your voice is entering the microphone. Too little sound level into the microphone means low volume at the receiving end. Only so much can be done with a receiver volume control, and dare one turn it up for a station with a low modulation level he will likely get blasted by the next station with a proper level, not to mention what a station with excessive modulation will do to him! Under noisy signal (i.e., weak signal) conditions your voice must compete with the received noise accompanying your signal; it's your voice versus the accompanying noise. The loudness of the accompanying noise is determined by the strength of your signal (strong signals quiet the noise, weak signals do not), the loudness of your voice is determined by your modulation level.

Thus far it sounds like the more "audio" the better, ...but wait! While excessive audio may give you "booming audio" at the receiving end it can be harmful to. It can cause distortion, increase the talker's background noise level, and reduce intelligibility, especially under weak

signal conditions. In some cases excess deviation (modulation) can result in interference to adjacent channels. Too much deviation can cause you to "swing" right out of the pass band of a receiver when your signal is weak, causing your audio to cut out on voice peaks, making you unreadable. (The effective bandwidth of an FM receiver is greater for strong signals than it is for weak signals so the sound of strong signals is less affected by excessive deviation.) If you've ever heard a weak signal on a repeater which seems to come in ok during speech pauses (though perhaps somewhat noisy) but rapidly cuts in and out whenever the operator speaks, the cause was likely excessive deviation.

TRANSMITTER AUDIO

In today's typical VHF FM radios there is little provided for operator control over audio signal levels. In most cases the loudness of the sound into the microphone is the only control you have. That loudness is affected by two things: How loud you speak, and how far you hold the microphone from your mouth. Most people don't realize that moving a microphone that's one inch away from your mouth to two inches away can drop the microphone output level by a factor of 4! In fact, sound drops off as the square of the distance from the source; every time you double the distance between a microphone and the sound source the volume drops by an additional factor of 4. Moving the microphone from 1" away to 3" away can drop your audio level by a factor of 9! Fortunately it doesn't sound quite that bad on the other end because the response of the human ear is logarithmic. For example, a drop in volume by a factor of 2 will sound like a 30% decrease in loudness and a drop by a factor of 8 will sound like a 60 % decrease. The ratio between your audio and any received background noise accompanying your signal does not, however, benefit from the logarithmic response of the listeners ear.

If both you and the listener are in quiet environments a low modulation level might be reasonably tolerable. However, in the face of background noise at either end, or during weak signal conditions, it can make the difference between good copy and none at all. What if your in a noisy environment or mobile with all its attendant background noise? Your voice must compete with this background noise. The loudness of background noise is little affected by where or how you hold the microphone but the loudness of your voice is greatly affected. If you talk an inch or less away from the microphone the loudness of your voice into the microphone will be maximized while the loudness of the background will remain unchanged and the "signal to noise ratio" of your voice to the background noise will be at its greatest. Close talking the microphone also reduces variations in your audio level caused by unknowingly vary the distance of the microphone from your mouth when you hold it further away. Additionally, close talking the microphone reduces the amount of microphone gain

(amplification) required in the transmitter thus reducing the level of the background noise heard on your signal. Manufacturers know all this and design and adjust their radios to have just enough microphone amplification for "close talking" the microphone; back away from the microphone a little and your voice level drops dramatically!

There are other considerations to contend with too. For example, voices vary considerably from person to person both in volume and pitch. Some radios have an internal microphone gain control that can be adjusted to compensate for voice differences (which should never be used in an attempt to compensate for poor microphone technique) but most do not. There is one exception however, and that is the multimode radio capable of amplitude modulation modes such as AM and single sideband (SSB) which typically have a front panel microphone gain control because proper microphone gain setting is more critical for these modes. For these radios the best starting point is the recommended setting by the radio manufacturer while close talking the microphone. In general, the lowest setting which gives proper audio level while close talking the microphone will be the best one.

All FM radios have an internal adjustment called a deviation control which limits the maximum deviation (modulation) of an FM signal. Its location is often pointed out in the radio's manual. Set too high it will give the impression of "too much audio", set too low there will appear to be "too little audio" even when the operator is speaking loudly close to, and directly into, the microphone (this can also be caused by setting the microphone gain control improperly where one is provided). Manufacturers routinely set the deviation control a bit too high in their radios. If you find people asking you to back off the microphone, and your audio is consistently louder than the average on the band, you probably have excessive deviation. Proper deviation for Narrow Band Frequency Modulation (NBFM) used on the Amateur Radio bands is plus and minus 5 KHz maximum. This is usually checked and adjusted with a deviation meter as found in two-way radio service monitors or a meter such as the MFJ-224 Two Meter FM Signal Analyzer. Deviation should be set while speaking very close to the microphone in a somewhat louder than normal voice (to insure audio limiting on voice peaks as explained in the next paragraph). A deviation meter is the only way to accurately set the proper deviation level for modes that feed audio directly into the microphone jack such as SSTV (Slow Scan Television), Packet, and other digital modes.

Improper microphone level can be the cause of audio problems too. Even if deviation is set correctly microphone

level must also be correct. That's because FM transmitters have a limiter circuit between the microphone and the deviation control. It limits (clips off, or "flattens") the

peaks in voice audio limiting their maximum amplitude. This permits increasing the average audio level without increasing the maximum and helps to level differences between voices. While this adds some distortion to the audio signal (most of which is filtered out) the increase in average volume level improves intelligibility during noisy or weak signal conditions thus providing a net gain. If the microphone level is too high the distortion will become excessive reducing intelligibility under all signal conditions, if it's too low the benefit of limiting is lost and modulation levels will vary more with voice characteristics and microphone technique.

MICROPHONE TECHNIQUES

Radios and radio microphones are designed for close talking to reduce the effects of the speaker's background noise level. Always hold the microphone close to your mouth, say, no more than an inch away. Don't hold a microphone directly in front of your mouth, it is best held to the side of your face. This protects the microphone from your very humid breath and helps eliminate the annoying breathing sounds, clicks, pops, and blasts that often accompany speech at very close range. Speak in a normal tone keeping the level of your voice constant, don't let your voice trail off as you speak or half of what you say will go unheard.

What about a home fixed station? Same advice applies. How about desk microphones? Same thing. Unless you're in a studio with acoustic tile on the ceiling, carpeting on the floor, and drapes covering the walls, turning up the microphone gain so you can back off the microphone will plague your signal with room echo, slamming doors, barking dogs, rambunctious kids, the roar of cooling fans, etc.

Never, ever, place your handheld microphone on the seat of your car. Microphones have a tendency to be sat on, slide between the seat and back rest or between the seats, and get things piled on top of them; all frequently resulting in a keyed up radio that can lock up a repeater for as long as you're in the car. While you're doing so, you will be transmitting every sound the microphone can pick up including the car radio, cell phone calls, and potentially embarrassing conversations. It has happened here more than once. It certainly wouldn't do during a period when emergency communications are taking place.

MICROPHONES

Be careful substituting microphones for the one supplied with your radio. There are no standards for microphone output level (sensitivity), impedance, frequency response, directional characteristics, connector wiring, etc. Some have built-in preamps (requiring power) and have high

level outputs while others do not and much lower output levels, thus, you must also have the proper type. Any substitute will not likely have the same output as the original even if it's from the same manufacturer unless the

radio or microphone manufacturer specifies it as suitable for your radio. Connector wiring will likely be different, especially between different manufacturers but sometimes even with the same manufacturer. Microphones with built-in "noise canceling" are generally better in noisy environments such as mobile than those that do not.

Give your listeners and yourself a break by using proper microphone techniques.

Lee, N8LT

APRS

From:

SKP WAVE

VOL TWELVE, NUMBER 1

JANUARY, 2007

SUBMITTED BY:

E.A. "REX" KING, W5EAK, SKP 61977

APRS is growing everyday, and new ways to track people are evolving almost as fast.

I have found something that might be of interest to you, if you have already heard about it please forgive me.

Most of you are aware of the free software offered at <http://earth.google.com/> It allows you to look at the earth from all angles via satellite photos, and for \$20.00 per year you can subscribe to "Earth Plus" software with much better photos and other features.

Many of you have also used the software available at www.openaprs.net that features "Call Sign, Zip Code, City-State" look up and maps that can be overlaid with satellite photos, but did you know about "Google Earth KML" software that allows you to see APRS equipped Hams plotted on the "Google Earth software"?

While you are visiting <http://www.openaprs.net> look at the left side and you will see where you can download "Google Earth KML." After you do that, launch "Google Earth" and zoom in on a particular area, look on the left side of screen under "Places" and you will see "Open APRS," click on it.

What you will see then are APRS Equipped Hams, left click on an icon and you will get additional information about the station.

MY FIRST ECHO LINK CONTACT

Steve Skauge
KD8CCP

I recently attended a meeting at the Hiawatha Amateur Radio Club in Negaunee Michigan. Paul KB0P did a presentation on Echo Link. He went thru the theory and even had a live demo right at the meeting making a contact with a HAM in Wisconsin.

I have the Echo Link Program downloaded on my computer and even went on the Sunday Night Net with my 2 meter radio so I have been connected to other operators via Echo Link at other times. I just did not feel I was comfortable with using it via the computer or actually punching in the Node numbers on my hand held to make a contact. The presentation Paul did gave me the knowledge and confidence to work the mode. Now I just needed the time.

This month the Iron Mountain repeater 146.850 was down so I was a little bored. I decided to see if I could make any contacts just using my computer. I started up the program and put in the Node number for the Marquette Mi 440 repeater and I instantly heard several people talking. I recognized Paul's voice, KB0P and sat back and waited for an opening to join the conversation.

I realized as Paul was talking that he was actually in Minnesota on a trip. The LSAK2 repeaters in that region are linked to each other and via Echo Link. Paul keyed in and was now talking to me in Iron Mountain, Norm in Ishpeming and a several other HAMs in Minnesota!

We talked for quite awhile and made Paul's drive time fly by and filled my night with some quality HAM time! I noted that I was on my computer because the repeater was down. It was a great way to still get out!

I am now in the market for a 440 radio so I can call back to Iron Mountain from Marquette County when I travel in that direction to see my daughter. I can also see our ARES groups using

this type of technology in weather related situations. We will be able to relay important information during any emergency or event.

Our own Dennis, K8SWX has the Echo Link hook up in Iron Mountain. Dennis and Paul plan on getting together soon to coordinate the programs and do some "tweaking" that will make the repeaters more user friendly. I hope the project goes well!

MICHIGAN DISTRICT 8 ARES/RACES NET

FROM:

The ARRL Michigan Section Page

<http://www.arrl-mi.org/>

Submitted by KS80

On January 7th, 2007, the Michigan District 8 ARES/RACES kicked off their weekly net.

This net will be held every Sunday at 4:30 pm EST on the Michigan Emergency frequency of 3932 Khz.

The net started its life with quite a bang. I did not expect such a showing for the first net. The fact that it precedes the ARPSC net had a lot to do with that and I would like to thank Dale, WA8EFK and Marty, N8MG for checking in as well as a few others from under da bridge.

I would also like to thank all of the District 8 ARES/RACES members that checked in, as time goes on, we will all benefit from using this net as a training tool and an information resource.

Thanks all,
Jim Pearson, KS80
Net Manager
Michigan District 8 ARES/RACES Net

Mich-A-Con Amateur Radio Club

Minutes of the January 9, 2007 Meeting

The meeting was called to order by President Tom Martin, W8JWN at 6:30 PM.

Secretary Report:

The minutes of the December 12th meeting were read and approved.

Treasurer Report:

Balances for end of December:

Checking: \$91.18

Repeater Savings: \$1164.75

Regular Savings: \$1605.62

Petty Cash: \$25.63

Repeater Report:

Lee, N8LT, reported that the 85 repeater is back in service after making temporary repairs. A new final transistor has been ordered. Because of the age of the repeater and reliability problems Lee, N8LT, and Bob, WA8FXQ, were asked to consider various options for a replacement and report to the club at our next meeting. Dennis, K8SWX, and Steve, KD8CCP, will see if grant money is available to defray a portion of the cost.

The MIIMT packet node is back in service. EPROMs have been loaded into the remainder of the TNCs and all packet equipment is ready for installation at the Pine Mountain site.

ARES:

- Scott Celello is working on ID cards. He has also ordered the following emergency generator supplies: Astron power supply, RigRunner power strip, Isobar surge protector, Line Conditioner. Steve, KD8CCP, will provide an invoice to Scott for the equipment to be supplied by Rocconi's Hardware. Storage of the emergency generator equipment will be at the Sheriff's Dept.
- The ARES net has been fairly quiet over the holidays. The 85 repeater was out of service for one of the regularly scheduled nets.

Old Business:

There is no new information on the repeaters signs for US2 entering Iron Mountain.

New Business:

There will not be a Christmas party this year.

Announcements:

- The Negaunee Swap & Shop will be held on the first Saturday of February.

- Volunteers are needed for the Sled Dog Races. See Steve, KD8CCP.
- The Iron County Amateur Radio Club holds test sessions on the 3rd Thursday of every month before their club meeting. Exams must be arranged before hand. Examinees must arrive by 6:30PM and exams begin at 7:00. Call Dan Waters, AA9JG (906) 265-4240, danwaters@up.net
- Bob Meyers will meet with anyone wanting code practice after the ARES net on 146.52 simplex.

For the Good of the Order:

Members discussed their current radio related activities.

Adjournment:

The meeting was adjourned at 7:36 PM.

Submitted by: Mike Bray

Attendees:

Mike Bray, K8DDB – Secretary

Mike Boileau, N9NBN – Vice President

Randy Zandt, KB9ZES

Bob Uren, KC8TWG

Tom Martin, W8JWN - President

Scott Jarmusch, KA8TFF

Robert Olson, KD8DJN

Terry Moriarity, KB9ZER

Lee Michaud, N8LT

Dennis Beurjey, K8SWX - Treasurer

Burton Armbrust, WB8EBS

Ed Armbrust, W8XBO

Bob Meyers, WA8FXQ

Steve Skauge, KD8CCP

Links

ARRL WEB PAGE: <http://www.arrl.org>

ARRL MICHIGAN: <http://www.arrl.mi.org>

US REPEATERS: <http://www.usrepeaters.com>

MICH-A-CON : <http://www.qsl.net/ka1ddb>

Tropospheric Ducting Forecasts:

<http://www.dxinfocentre.com/tropo.html>

FCC Universal Licensing System:

<http://wireless.fcc.gov/uls/>

QTH.COM: <http://www.qth.com/>

QRZ.COM: <http://www.qrz.com/>

Ehamnet.com: <http://www.eham.net/>

CODELESS AMATEUR RADIO TESTING TENTATIVELY SET TO BEGIN FEBRUARY 23

from:

The ARRL Letter Vol. 26, No. 03 January 19, 2007

The ARRL has learned that the FCC's Report and Order (R&O) in the "Morse code proceeding," WT Docket 05-235 http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-178A1.pdf, is scheduled to appear in the Federal Register Wednesday, January 24. Assuming that occurs, the new Part 97 rules deleting any Morse code examination requirement for Amateur Radio license applicants would go into effect Friday, February 23, 2007.

The League cautions that this date is *tentative*, pending official confirmation and publication. "This change eliminates an unnecessary regulatory burden that may discourage current Amateur Radio operators from advancing their skills and participating more fully in the benefits of Amateur Radio," the FCC remarked in the Morse code R&O.

Publication of the R&O in the Federal Register starts a 30-day countdown for the new rules to go on the books. Rules and regulations that appear in the Federal Register constitute their official version.

Deletion of the Morse requirement is a landmark in Amateur Radio history. Until 1991, when a code examination was dropped from the requirements to obtain a Technician ticket, all prospective radio amateurs had to pass a Morse test. Once the new rules are in place, Amateur Radio license applicants no longer will have to demonstrate Morse code proficiency at any level to gain access to the HF bands. On or after the effective date of the new rules, an applicant holding a valid Certificate of Successful Completion of Examination (CSCE) for a higher license class will be able to redeem it for an upgrade. For example, a Technician licensee holding a valid CSCE for Element 3 (General) could apply at a VEC exam session, pay the application fee -- which most VECs charge -- and receive an instant upgrade.

A CSCE is good only for 365 days from the date of issuance. Candidates for General or Amateur Extra between now and the effective date of the new rules still must have Element 1 (5 WPM Morse code) credit to obtain new privileges, however. The new rules also mean that all Technician licensees, whether or not they've passed a Morse code examination, will gain HF privileges identical to those of current Novice and Tech Plus (or Technician with Element 1 credit) licensees without having to apply for an upgrade. Novices and Technicians with Element 1 credit have CW privileges on 80, 40, 15 meters and CW, RTTY, data and SSB privileges on 10 meters. Technician licensees who have not passed a Morse code test should *not* operate on any HF bands until the Morse requirement is officially deleted.

The FCC R&O includes an Order on Reconsideration in WT Docket 04-140 -- the so-called "omnibus" proceeding. It will modify the Amateur Service rules in response to ARRL's request to accommodate automatically controlled narrowband digital stations on 80 meters in the wake of other rule changes that were effective last December 15. The Commission designated 3585 to 3600 kHz for such operations, although that segment will remain available for CW, RTTY and data.

The ARRL has posted all relevant information on these important Part 97 rule revisions on its "FCC's Morse Code Report and Order WT Docket 05-235" Web page <http://www.arrl.org/fcc/morse/>.

EXAM SCHEDULE:

03-Feb-2007

Sponsor: Mich-A-Con

Time: 9:00AM (Arrive by 8:30)

Contact: Mark J.Lewis N8UKD (906) 774-6589

Email:

VEC: [ARRL/VEC](#)

Location: DICKINSON COUNTY LIBRARY (Conference Room)
IRON MOUNTAIN, MI 49802

10-Mar-2007

Sponsor: HIAWATHA ARA

Time: 8:30 AM (Walk-ins allowed)

Contact: RICHARD E SCHWENKE (906)249-3837

Email: N8GBA@CHARTERMI.NET

VEC: [ARRL/VEC](#)

Location: MARQUETTE HEALTH DEPT BLDG 184 US 41 E NEXT
TO MI STATE POLICE BLDG NEGAUNEE, MI 49866

14-Apr-2007

Sponsor: HARC/CCRAA

Time: 8:30 AM (Walk-ins allowed)

Contact: GEORGE R THURNER (906)337-2542

Email: W8FWG@ARRL.NET

VEC: [ARRL/VEC](#)

Location: MICHIGAN TECH UNIVERSITY-US HWY 41
WADSWORTH RESIDENCE HALL OPPOSITE CAMPUS RADIO
WMTU ROOM NUMBER G04W HOUGHTON, MI 49931

14-Apr-2007

Sponsor: DELTA COUNTY ARS

Time: 9:00 AM (Walk-ins allowed)

Contact: LYSLE L ELDER (906)789-1543

Email: HAMBONE@UPLUGON.COM

VEC: [ARRL/VEC](#)

Location: BAY DE NOC COMM COLLEGE-ROOM 402E HEALTH &
APPLIED SCIENCES BLDG FROM US2-TURN W TO
DANFORTH RD PARKING LOT "D" ESCANABA, MI 49829

05-May-2007

Sponsor: Mich-A-Con

Time: 9:00AM (Arrive by 8:30)

Contact: Mark J.Lewis N8UKD (906) 774-6589

Email:

VEC: [ARRL/VEC](#)

Location: DICKINSON COUNTY LIBRARY (Conference Room)
IRON MOUNTAIN, MI 49802

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 drivers 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. (2007 fee is \$14).

License Study Materials Available from the ARRL:

Technician Class:

NOW YOUR TALKING -5TH edition - Order No. 8810 \$19.95

ARRL Tech Q&A -3rd edition - Order No. 8829

General Class:

ARRL General Class License Manual 5th ed.

Valid beginning July 1,2004

Order No. 9205 \$16.95

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

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

<http://hamuniversity.com>

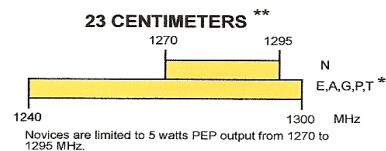
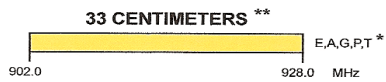
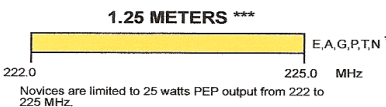
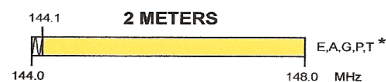
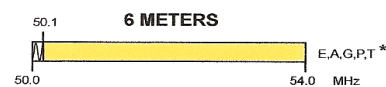
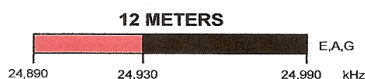
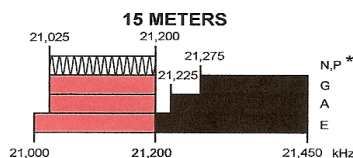
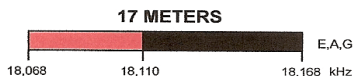
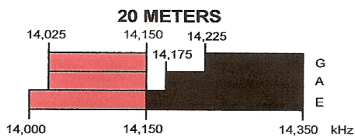
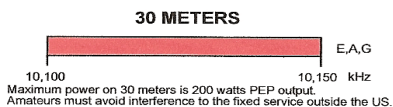
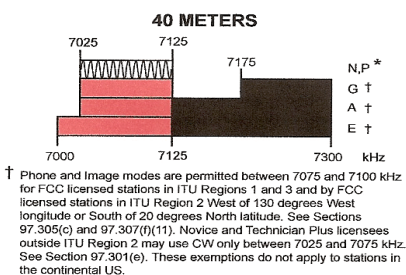
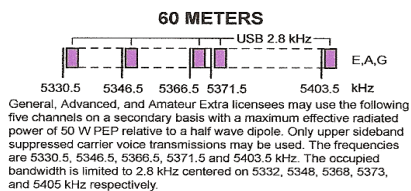
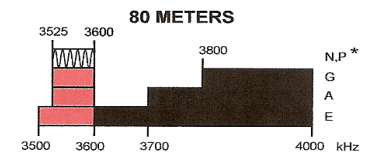
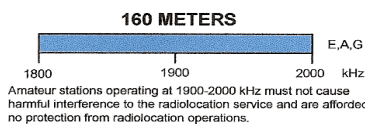
TOM, W8JWN LIKES AMPS!!!!



US Amateur Bands

ARRL The national association for **AMATEUR RADIO**

Effective Date December 15, 2006



US AMATEUR POWER LIMITS

At all times, transmitter power should be kept down to that necessary to carry out the desired communications.

Power is rated in watts PEP output. Unless otherwise stated, the maximum power output is 1500 W.

Power for all license classes is limited to 200 W in the 10, 100-10, 150 kHz band. Novices and Technicians are restricted to 200 W below 28.5 MHz.

In addition, Novices are restricted to 25 W in the 222-225 MHz band and 5 W in the 1270-1295 MHz subband.

- KEY**
- = CW, RTTY and data
 - = CW, RTTY, data, MCW, test, phone and image
 - = CW, phone and image
 - = CW and SSB phone
 - = CW, RTTY, data, phone, and image
 - = CW only
 - = USB Phone only

- E = AMATEUR EXTRA
- A = ADVANCED
- G = GENERAL
- P = TECHNICIAN PLUS
- T = TECHNICIAN
- N = NOVICE

* Technicians who have passed the 5 wpm Morse code exam are indicated as "P".

** Geographical and power restrictions apply to all bands with frequencies above 420 MHz. See *The ARRL FCC Rule Book* for more information about your area.

*** 219-220 MHz allocated to amateurs on a secondary basis for fixed digital message forwarding systems only and can be operated by all licensees except Novices.

All licensees except Novices are authorized all modes on the following frequencies:

- 2300-2310 MHz
- 2390-2450 MHz
- 3300-3500 MHz
- 5650-5925 MHz
- 10.0-10.5 GHz
- 24.0-24.25 GHz
- 47.0-47.2 GHz
- 76.0-81.0 GHz
- 122.25-123.0 GHz
- 134-141 GHz
- 241-250 GHz
- All above 275 GHz



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Mich-A-Con ARC Activities for FEBRUARY 2007						
SUN	MON	TUE	WED	THUR	FRI	SAT
				1 ARES	2	3 SWAP SHOP NEG
4 UPSN	5	6	7	8 ARES	9	10
11 UPSN	12	13 MEETING	14	15 ARES	16 UP DOG SLED RACES	17 UP DOG SLED RACES. BREAKFAST
18 UPSN UP DOG SLED RACES	19	20	21	22 ARES	23	24
25 UPSN	26	27	28			

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

Please remit dues to:
Dennis Beurjey K8SWX
612 Balsam Street
Kingsford, Mi 49802

Name: _____
 Address: _____
 City, State, Zip: _____
 Call Sign: _____
 Email Address: _____
 Phone: _____
 ARRL Member? Yes ___ No ___

Annual dues are due in January. Please make checks payable to Mich-A-Con ARC
 Annual dues are Full Membership - Single \$20___ * Family \$30___ * Repeater-Only \$10 ___**

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 or \$2.50 per month for a Family membership.

**If you are an occasional or seasonal user of the repeater, please consider our Repeater-Only-Membership

**FREE MONEY FOR
COLLEGE: ARRL
SCHOLARSHIP
APPLICATION
DEADLINE IS
FEBRUARY 1**

FROM:

The ARRL Letter Vol. 26, No.
01 January 5, 2007

The deadline to apply for academic year 2007-2008 ARRL Foundation scholarships is February 1, 2007. ARRL Chief Development Officer Mary Hobart, K1MMH, urges radio amateurs who are college-bound high school seniors or already in college and even older students returning to school to take advantage of this opportunity. "With the costs of higher education rising every year, I hope that many young hams will apply for an ARRL scholarship," Hobart said.

"There's a great deal of interest on the part of individuals, clubs and ham radio organizations to provide financial resources, and many of the scholarships have very open selection criteria." The ARRL Foundation has added three scholarships to its list of those available: The Zachary Taylor Stevens Scholarship, The Richard W. Bendicksen, N7ZL, Memorial Scholarship and The Gary Wagner, K3OMI, Scholarship. These latest scholarship awards bring the total number of ARRL scholarships to 44. Some of these provide multiple awards.

All information on ARRL Foundation scholarships for young radio amateurs, including application forms and instructions, is only available on the ARRL Foundation Scholarship Programs Web page

<http://www.arrl.org/arrlf/scholgen.html>

**FCC SUSPENDS
NEW VANITY
CALL SIGN
PROCESSING
FROM:**

The ARRL Letter Vol. 26, No.
02 January 12, 2007

The FCC has put new Amateur Radio vanity call sign processing on hold while it modifies the software that handles vanity applications. The suspension is a result of a rule change that went into effect December 15 to discourage the filing of multiple applications by one individual for the same call sign.

The FCC is still processing vanity call sign renewal applications. "The Commission continues to accept [new] vanity call sign applications," says a brief announcement on the FCC's Universal Licensing System (ULS) Web page <http://wireless.fcc.gov/uls> "However, these applications will not be processed until software changes in accordance

with the recent rule making have been fully implemented."

Just when that might happen is not known. As revised in the FCC's recent Report and Order (R&O) in WT Docket 04-140, §97.19(d)(1) stipulates that if the FCC receives more than one application requesting a vanity call sign from a single applicant on the same receipt day, it will process only the first application entered into the ULS. "Subsequent vanity call sign applications from that applicant with the same receipt date will not be accepted," the rule concludes. The FCC says that when processing resumes, it will handle pending applications for new vanity call signs "consistent with the date order in which they were received." This suspension affects new vanity call sign applications submitted on December 18 or later. Typically, it takes 18 days from the time the FCC receives a vanity application until the call sign is issued -- or the application is denied.

The FCC granted the last Amateur Radio vanity call signs on January 4 for applications received December 15. All vanity call sign renewal applications, including those for club stations, must be filed via the ULS. The current vanity call sign fee, payable for new applications as well as renewals, is \$20.80 for the 10-year license term.

**ISS CREW MEMBER SUNI WILLIAMS,
KD5PLB, STARTS ARISS QSO STREAK**

FROM :

The ARRL Letter Vol. 26, No. 03 January 19,
2007

**ISS CREW MEMBER SUNI WILLIAMS,
KD5PLB, STARTS ARISS QSO STREAK.** If she keeps up her current pace, ISS Expedition 14 Flight Engineer Suni Williams, KD5PLB, could set a new record in the number of Amateur Radio on the International Space Station (ARISS) school contacts.

Since arriving on the space station in late December aboard the shuttle Discovery, Williams has logged five ARISS ham radio contacts with schools, starting the first week in January. Recently she told youngsters at Dilworth Elementary School in San Jose, California, that viewing the entire planet Earth from space is the most impressive thing she's seen to date. She also confirmed that the lack of gravity aboard the ISS does affect the human body. "Your muscles are used to working on the ground," she said. "In space they have to relearn that gravity is not helping them -- for example, going to the bathroom." Williams also advised any prospective astronauts among the kindergarten through grade five pupils to pick a career they enjoy and stay in good health.

ARISS arranged the direct VHF contact January 8 between AA6W at the school and NA1SS in space. ISS Expedition 12 Commander Bill McArthur, KC5ACR, now holds the record for the most ARISS school contacts in a single mission -- 37. The Dilworth contact was the second successful school QSO on the same day for Williams, who's indicated she'd like to speak via ham radio with as many schools as possible during her six months in space.

On January 16, Williams chatted with seventh graders from two schools in Streator, Illinois: St Anthony's School and Northlawn Junior High School. Members of the ARRL-affiliated Starved Rock Radio Club, including club president Steven Michalski Jr, KB9UPS -- who loaned his call sign for the event -- set up the Earth station at the school for the direct VHF contact arranged by ARISS. Williams answered 20 of the students' questions during

the approximately 10-minute pass. "I think the most important and interesting thing that I've learned is looking back at our Earth and seeing that there really are no borders between any of the countries on the land masses down there," she told the Illinois students. "We're all just human beings working together."

Responding to other questions, Williams explained that the challenges of doing a spacewalk include confronting the "unfriendly environment" of space and having to work while wearing a pressurized spacesuit. On the other hand, "even moving big, heavy objects around in space is no problem, because they really don't weigh anything." ARISS <http://www.rac.ca/ariss> is an international educational outreach with US participation by ARRL, AMSAT and NASA.

GENERALLY SPEAKING

FROM AN EMAIL BY:
LEE N8LT

Prospective General Class applicants should know that taking the General written test without taking the code test, before the effective date of the rule change (probably in late February), will only yield a Certificate of Successful Completion of Examination (CSCE) for the written test.

Upgrade to General after the new rules take effect is NOT automatic. After the rules change becomes effective Technicians with a valid General-written-test CSCE (CSCEs are only good for one year) can apply for a General License upgrade at a subsequent examination session by submitting the CSCE, proof of a Technician License, and paying the \$14 fee.

No further testing will be required at that time. Thus, taking the General written test before the effective date of the rule change and applying for an upgrade to General after the effective date of the rule change will cost an extra \$14 and require attendance at two examination sessions with no saving in time. One can still pass the written test and code test prior to the effective date of the rule change and get General Class privileges immediately.

Details can be found in the February QST pages 9 and 79, ARRL Bulletin ARLB004 (1-19-07), and the ARRL Newsletter, Vol 26, No. 03 (1-19-07) which is linked on the Club web site.

MICH-A-CON RF

MICH-A-CON ARC
C/O STEPHEN SKAUGE
945 WOODWARD AVE APT 5
KINGSFORD, MI 49802-4438

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:

President:
Tom Martin, W8JWN
(906) 774-5463
tmartin@chartermi.net

Vice President:
Mike Boileau N9NBN
(715) 251-3137
n9nbn@uplogon.com

Secretary:
Mike Bray, K8DDB
(906) 563-7020
mikebray@chartermi.net

Treasurer:
Dennis Beurjey, K8SWX
(906) 771-1996
dbeurjey@msn.com

Reminders:

Club dues for the year 2007 were payable in January. Please use the Membership Application/Renewal form in this newsletter when paying your dues. Checks should be made payable to Mich-A-Con Arc and sent to our Treasurer, Dennis Beurjey, K8SWX, at the address listed on the form.

Thank-you for supporting your club!

The monthly meeting for February is on Tuesday the 13th at 6:30 PM in the Grace United Methodist Church, 721 Norway Street Norway Michigan. (Upstairs in the room next to the sanctuary.)

The dates for this year's sled dog race are Friday, February 16th – Sunday, February 18th. Start times are 6:45 p.m. EST, Friday, February 16th, for the U.P. 200 (Marquette Start) and 5:30 p.m. EST for the Midnight Run (Gwinn Start).

If you can help contact:

Lou Gembolis KG8NK
lgembolis@chartermi.net
Sheree Gembolis KD8EDS
sgembolis@chartermi.net

Or call us at 906 485-5442

