



MICH-A-CON

Iron Mountain,
Dickinson County, Mich

March 2017

Meeting Reminder: Second Wednesday of the Month

Which is **March 8, 2017** at 07:00 PM at the Dickinson Library, Iron Mountain.

From The President

March 2017 Words from the President

Brief words for this issue. I had a long vacation in Las Vegas and have been ill for 8 days. I caught a "Vegas" virus last week. I haven't felt like doing anything!

Fun was had by 19 club members and their guests last night at Bartoletti's Supper Club in Aurora. The food and chat was excellent!

See you all at the club meeting this coming Wednesday at 7 PM in the library.

73,

Tom W8JWN

**And Now a visit at
Bartoletti's:**



Inside this issue:

<i>From The President</i>	1
<i>Secretary Report</i>	4
<i>News.....</i>	6
<i>Great Lakes HamCon</i>	6
<i>FCC Comm 5 MHz</i>	7
<i>Mich-A-Con Class</i>	8
<i>Houghton Ham Test Reschedule</i>	8
<i>WiAW Schedule</i>	9
<i>ARRL Michigan Section News</i>	10
<i>ARRL Dales Tales</i>	13
<i>Propagation Bulletin</i>	16
<i>ARRL DX Report</i>	17
<i>Classified</i>	18
<i>Links and Stuff</i>	20
<i>About Our Club</i>	21
<i>DX Code Conduct</i>	22
<i>Membership List</i>	23
<i>Membership Form</i>	24





MICH-A-CON AMATEUR RADIO CLUB MINUTES OF February 8th, 2017

President Tom Martin called the meeting to order at 7:00 pm.

Secretary Report

Minutes of the January 11th meeting were read and approved.

Treasurer Report

Balances as of February 8, 2017

Checking -\$229.72

Savings -\$1720.64 (Repeater - \$422.60)

Cash - \$22.00

Repeater Report

Reports indicated the repeater has been working fine.

Old Business

Tom Martin reported that one more QSL request from Veteran's Day was received and mailed out.

A reminder was made regarding the club gathering at Bartoletti's on Saturday March 4th. A count was taken of those planning to attend.

The new ham license class is continuing to meet. All candidates have remained in the class. The license testing is planned in two weeks.

There was nothing new to report concerning efforts to get the club newsletter to hams in the local area who are not currently club members.

The Echolink unit, now at Gary Schafer's home, was reported as working well.

Burt Armbrust reported that a fair amount of Jim Riverside's (sk) equipment was sold at the Negaunee Swap and Shop.

Those who attended the Negaunee Swap and Shop reported that for sale items were a little more sparse than normal.

**New Business**

A request was made by Roger Van Damme, representing a group staging the Central U.P. Road Rally, to use our two meter repeater for the weekend of June 24. The rally will be held in northern Menominee County, and the the repeater would be needed from approximately noon to 10 pm. A motion to close the repeater for the day (Scott Jarmusch/Debby Grabowski) was passed unanimously.

Nobody present reported assisting with the Niagara Ski Walk that was held recently.

Tom Martin circulated information he received regarding The Nifty Guide to Adventures in DXing.

Adjournment

The meeting was adjourned at 7:35 pm. (Burt Armbrust/Bill Grabowski)

The 50/50 drawing was won by Joe Ferris. The club treasury was enriched by \$20.00.

For the Good of the Order

Attendees reported on their recent activities.

Submitted by Joe Ferris

Attendees

Tom Martin, W8JWN
Scott Jarmusch, KA8TFF
Joe Ferris, KC9TQR
Debbie Grabowski, KD8VTS
Burton Armbrust, Sr., WB8EBS
Bill Grabowski, KD8VTT
Gary Schafer, K4FMX
Barry Perron, KC9NFT
Roger Van Damme, KB8PLK

Joyce Williams, Visitor

News

Great Lakes Ham Con

By now you have heard the news about the Great Lakes HamCon event which will take place at Michigan International Speedway on October 7 & 8, 2017.

I have some important information to pass along to you relative to the GLHamCon:

The parent organization of the event is the Great Lakes Amateur Radio Association (GLARA) and was organized as a 'Council of Clubs' which is another way of saying that the club members are also clubs from around Southeast/South Central Michigan. The GLARA currently has 14 member clubs.

GLARA recently received word that they have been granted ARRL Club Affiliation.

Probably even more significant is the fact that the event at MIS was just named to be the 2017 Great Lakes Divi-

sion Convention! This convention will be the first in Michigan in a long time and they are honored to be able to host the entire Great Lakes Division.

The GLARA president has recently released an invitation for hams around the state to volunteer to assist with the many tasks that need to be done as such an event.

You can find the letter on their website at glhamcon.org. They are looking for talented individuals and are in need of talented hams!

I will have more information at the middle of the month in my regular Section News Column.

73 until then,
Larry, WB8R



FCC Invites Comments on 5 MHz

ARL-
B007 FCC Invites Comments on ARRL Petition to Allocate
New 5 MHz Band

ZCZC AG07
QST de W1AW
ARRL Bulletin 7 ARLB007
From ARRL Headquarters
Newington CT February 21, 2017
To all radio amateurs

ARLB007 FCC Invites Comments on ARRL Petition to Allo-
cate New 5 MHz Band

The FCC has invited comments on the ARRL's January 12
Petition for Rule Making to allocate a new, contiguous
secondary band at 5 MHz to the Amateur Service. The
League also asked the Commission to keep four of the
current five 60-meter channels - one would be within the
new band - as well as the current operating rules, includ-
ing the 100 W PEP effective radiated power (ERP) limit.
The federal government is the primary user of the 5 MHz
spectrum. The FCC has designated the League's Petition
as RM-11785 and put it on public notice.

Comments are due Monday, March 20. ARRL plans to file
comments in support of its petition.

The proposed ARRL action would implement a portion of
the Final Acts of World Radiocommunication Conference
2015 (WRC-15) that provided for a secondary internation-
al allocation of 5,351.5 to 5,366.5 kHz to the Amateur
Service; that band includes 5,358.5 KHz, one of the ex-
isting 5 MHz channels in the US. The FCC has not yet act-
ed to implement other portions of the WRC-15 Final Acts.

"Such implementation will allow radio amateurs engaged
in emergency and disaster relief communications, and
especially those between the United States and the Car-
ibbean basin, to more reliably, more flexibly and more
capably conduct those communications [and prepared-
ness exercises], before the next hurricane season in the
summer of 2017," ARRL said in its petition.

The League said that 14 years of Amateur Radio experi-
ence using the five discrete 5-MHz channels have shown

that
hams can get along well with primary users at 5 MHz,
while complying with the regulations established for their
use. "Neither ARRL, nor, apparently, NTIA is aware of a
single reported instance of interference to a federal user
by a radio amateur operating at 5 MHz to date," ARRL
said in its petition. NTIA - the National Telecommunica-
tions and Information Administration, which regulates
federal spectrum - initially proposed the five channels for
Amateur Radio use. In recent years, Amateur Radio has
cooperated with federal users such as FEMA in con-
ducting communication interoperability exercises.

The League said in its petition that while the Amateur
Radio community is grateful to the FCC and NTIA for
providing some access to the 5-MHz band, "the five chan-
nels are, simply stated, completely inadequate to accom-
modate the emergency preparedness needs of the Ama-
teur Service in this HF frequency range," ARRL said. Ac-
cess even to the tiny 15-kHz wide band adopted at WRC-
15 would "radically improve the current, very limited ca-
pacity of the Amateur Service in the United States to ad-
dress emergencies and disaster relief," ARRL said.

The WRC-15 Final Acts stipulated a power limit of 15 W
effective isotropic radiated power (EIRP), which the
League said "completely defeats the entire premise for
the allocation in the first place."

ARRL said the FCC should permit a power level of 100 W
PEP ERP, assuming use of a 0 dBd gain antenna, in the
contiguous 60-meter band. "To impose the power limit
adopted at WRC-15 for the contiguous band would ren-
der the band unsuitable for emergency and public service
communications," the League said.

The ITU Radio Regulations permit assignments at vari-
ance with the International Table of Allocations, provided
a non-interference condition is attached.

Interested parties may comment on RM-11785 using the
FCC's Electronic Comment Filing System (ECFS) at,
<https://www.fcc.gov/ecfs/>.

NNNN

Ham Radio Class

MICH-A-CON

Amateur Radio Club

The Mich-A-Con amateur radio club will be conducting a ham radio class starting Wednesday, January 11 at 7:00 in the Dickenson County Library. The class is expected to meet weekly until March 1. At the end of the class there will be a test session scheduled so the students can obtain their Ham Radio License.

Contact: Bob Meyers at 906 396-0119
or Skip at 906 774-3371

Houghton Ham Test Reschedule

Due to inclement weather the ham exams scheduled for Saturday, January 7, 2017 in Houghton County (Quincy Hill) have been cancelled.

The next scheduled exam will be April 1, 2017

This announcement authorized by Glenn P. Ekdahl, WA8QNF

73, George Thurner, W8FWG w8fwg@arrl.net

ARLB032 W1AW 2016/2017 Winter Operating Schedule

ARRL Bulletin 1 ARLB001
From ARRL Headquarters
Newington CT January 3, 2017
To all radio amateurs

Morning Schedule:

Time	Mode	Days
1400 UTC (9 AM EST)	CWs	Wed, Fri
1400 UTC (9 AM EST)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1500 UTC to 1700 UTC - (10 AM to 12 PM EST)
1800 UTC to 2045 UTC - (1 PM to 3:45 PM EST)
(Station closed 1700 to 1800 UTC (12 PM to 1 PM EST))

Afternoon/Evening Schedule:

2100 UTC (4 PM EST)	CWf	Mon, Wed, Fri
2100 " "	CWs	Tue, Thu
2200 " (5 PM EST)	CWb	Daily
2300 " (6 PM EST)	DIGITAL	Daily
0000 " (7 PM EST)	CWs	Mon, Wed, Fri
0000 " "	CWf	Tue, Thu
0100 " (8 PM EST)	CWb	Daily
0200 " (9 PM EST)	DIGITAL	Daily
0245 " (9:45 PM EST)	VOICE	Daily
0300 " (10 PM EST)	CWf	Mon, Wed, Fri
0300 " "	CWs	Tue, Thu
0400 " (11 PM EST)	CWb	Daily

Frequencies (MHz)

CW: 1.8025 3.5815 7.0475 14.0475 18.0975 21.0675
28.0675 147.555
DIGITAL: - 3.5975 7.095 14.095 18.1025 21.095
28.095 147.555
VOICE: 1.855 3.990 7.290 14.290 18.160 21.390
28.590 147.555

Notes:

CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 and 15 WPM
CWf = Morse Code practice (fast) = 35, 30, 25, 20, 15, 13 and 10 WPM
CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.
DIGITAL = BAUDOT (45.45 baud), BPSK31 and MFSK16 in a revolving schedule.

The voice mode used for W1AW's 40 meters voice bulletins is now full-carrier, double sideband AM.
Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.
On Tuesdays and Fridays at 2330 UTC (6:30 PM EST), Keplerian Elements for active amateur satellites are sent on the regular digital frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0100 UTC (8 PM EST) Thursdays and 0100 UTC (8 PM EST) Fridays.

Audio from W1AW's CW code practices, CW/digital bulletins and phone bulletin is available using EchoLink via the W1AW Conference Server named "W1AWBDCT." The monthly W1AW Qualifying Runs are presented here as well. The audio is sent in real-time and runs concurrently with W1AW's regular transmission schedule.

All users who connect to the conference server are muted. Please note that any questions or comments about this server should not be sent via the "Text" window in EchoLink. Please direct any questions or comments to w1aw@arrl.org.

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Digital at 15 minutes past the hour, and CW on the half hour.

All licensed amateurs may operate the station from 1500 UTC to 1700 UTC (10 AM to 12 PM EST), and then from 1800 UTC to 2045 UTC (1 PM to 3:45 PM EST) Monday through Friday. Be sure to bring your current FCC amateur radio license or a photocopy.

The W1AW Operating Schedule may also be found on page 96 in the January 2017 issue of QST or on the web at <http://www.arrl.org/w1aw-operating-schedule>.

ARRL MICHIGAN SECTION NEWS

Greetings to the hams of Michigan,

We are patiently (?) working our way through the winter and the warmer than normal weather in many parts of the state is giving us thoughts of an early spring. Here in the southernmost part of Michigan we have been having more days above freezing than those below freezing and the weight restrictions on our roads have been implemented in this part of the state. One thing is certain in that we will take what we get.

Thoughts of spring are apparent in that the annual NWS Spotter Training events have started here in Michigan. I attended our training in Coldwater last evening along with a number of hams, police, fire, and emergency management personnel. Thanks to the good folks from NWS IWX for presenting yet another interesting training session.

Be sure to take advantage of the training classes that the NWS are presenting across the state. Even if you attended training many times before, the science of weather changes with new technology which adds to our understanding and improves our observation skills. The training is free and is often required for ARES programs.

Coming Events

In 2017 (and beyond), Michigan has a number of planned activities coming our way that measure high on the amateur radio Richter scale.

The planning portion of the Michigan State Parks on the Air (MSPOTA) is nearing completion as this is being written. This bold event is to celebrate the 100th Anniversary of the Michigan State Parks system. We are expecting to have the list of what parks will be active in each of the three years of the event from Parks and Recreation very soon now.

We are expecting to go live on April 1, 2017.

Each park is going to have Parks and Recreation provided QSL cards available via SASE. The first 500 cards will be park-specific and requestors beyond those initial cards will receive a generic State Parks QSL card. This will mean that there will be a great rush to be one of the first 500 contacts for all of the parks in order to get the coveted park specific cards from all the parks. Who will get a clean sweep? I suspect that there will be some Clean Sweep award certificates for Michigan stations and for those outside of Michigan.

We expect the state to print and provide in excess of 50,000 QSL cards for this first of its kind event.

Also in April, we two activities concern the upcoming 100th Anniversary of the Michigan State Police. The actual MSP anniversary date is April 19.

Beginning on April 15 through April 30, W8P will be on the air from the Livingston Amateur Radio Klub in Howell, MI. Frequencies will be 21.300, 14.226, 7.185 and 3.850 MHz Full information available on the ARRL web site. Thanks to Les, W8MSP for organizing this nifty event. I have seen the QSL Cards that have been produced for this event and they are very nice.

On April 22 and 23 (Zulu), the 100th Anniversary of the Michigan State Police will be acknowledged and celebrated by an activation of the amateur radio station at the new Michigan State EOC using the callsign WS8EOC. Frequencies will be 3.560, 3.930, 7.065, 7.230, 14.030 and 14.230 MHz.

To support the Michigan State Parks on the Air event going on at the same time, the station will also operate 146.58 FM simplex. The SEOC station has a significant VHF footprint.

The Michigan State Police will be providing a special QSL for this event. More information, including QSL instructions is available here: <http://ares-mi.org/MSP100.php>.



Last, but certainly not least, the Great Lakes HamCon, presented by the Great Lakes Amateur Radio Association at Michigan International Speedway, scheduled for October 7 & 8, 2017 is moving forward in the planning stages. Our partner clubs will be providing manpower and other resources necessary to make this unique event a rousing success for the initial event and lay the groundwork for events going forward.

This is truly a one in a kind event that will set high standards for hamfests/conventions in the future. Our teams are hard at work making the necessary arrangements for forums, meeting places and other things and activities that will set the Great Lakes HamCon aside from 'normal hamfests'.

Be sure to mark your calendars for October 7 & 8, 2017 for a trip to the future of hamfests at Michigan International Speedway.

New Club Officers

On January 16, 2017 the Monroe County Radio Communications Association held election of officers for 2017.

The new officers for this year are:

- President - John Copeland, N8DXR
- Vice President - Glen Ohlemacher, K8GO
- Secretary - Fred Van Daele, KA8EBI
- Treasurer - Brenda Van Daele, KB8KQC
- Director - Paul Trouten, W8PI
- Director - Rodney Haddix, KD8ZLN
- Director - Wesley Busdiecker, KC8SKP

My thanks and appreciation for those that choose to step forward to lead their respective groups. Clubs are the lifeblood amateur radio.

Hamfest Registrations

The hamfest season in Michigan is well underway and many of the clubs are registering their events on the ARRL website. Having your event listed not only tells the world that your group is hosting an event, but it allows everyone an opportunity to do long range planning for vacations and other travel to attend.

In addition, early registration removes the forehead slapping and verbal exclamations that happen when 3

weeks before your event date it is realized that the opportunity for the ARRL assistance and prizes has passed you by and no one knows about your hamfest except for your club.

I have a solution for that problem going forward: On your list of things to do for this year's hamfest, I suggest that clubs add notification to the ARRL of next year's hamfest as part of your 'after-action report' for this year's swap.

Hospitality Acknowledgements

Thanks to the following groups for the fine hospitality shown to the section staff on recent visits:

- Jan 19, 2017 Hillsdale ARC Meeting, Hillsdale, MI
- Jan 23, 2017 Livonia ARC Meeting, Livonia, MI
- Jan 29, 2017 Hazel Park Swap & Shop, Madison Hgts, MI
- Feb 4, 2017 Hiawatha Amateur Radio Assn Shop & Swap – Negaunee, MI
- Feb 7 – 10, 2017 MPSCS Interop Conference, Traverse City, MI
- Feb 11, 2017 Traverse City Hamfest
- Feb 12, 2017 South Lyon AARC Meeting, South Lyon, MI

Section Staff Travel Plans

- Feb 16, 2017 Kalamazoo ARC Meeting, Kalamazoo, MI – WB8R
- Feb 19, 2017 Livonia ARC Swap & Shop – WB8R
- Feb 21, 2017 General Motors ARC Meeting, Utica, MI –WB8R
- Mar 8, 2017 Hazel Park ARC Meeting – WB8R
- Mar 11, 2017 Lowell Amateur Radio Youth Club Hamfest – WB8R
- Mar 18, 2017 Crossroads Hamfest, Kalamazoo, MI – WB8R
- Apr 22, 2017 Chassell Hamfest, Chassell, MI**
- May 6, 2017 Cadillac Hamfest, Cadillac, MI – WB8R

Michigan Section Traffic/ARPSC Nets (all times local)

Please note that time adjustments may be necessary due to propagation changes. Contact your net manager for alternate frequencies and/or times.

MACS - MI Amateur Communications System 3.952 1000
Daily UPN – Upper Peninsula Net 3.921 1700 Daily; Noon
Sun

MIARPSC – MI Amateur Radio Public Service Corps 3.932
1700 Sun

QMN – The Michigan Net 3.563 1830 and 2200 Daily

MITN – MI Traffic Net 3.952 1900 Daily

MIDTN – MI Digital Traffic Net 3.583 (Olivia 8/500) 2000
Tu, Th, Sat

MIADS – MI ARES D-Star Net Reflector 24A Mon 2000

D8EN - District 8 Emergency Net 3.909 Wed 2100

GLETN – Great Lakes Emergency and Traffic Net 3.932
2000 Daily

MVTN – MI VHF Traffic Net IRA Link System 2100 Mon,
Wed, Fri, Sun

NLEUP - Northern Lower Eastern UP Net 146.64- 18:30
Daily

SEMTN – SE MI Traffic Net 146.76- 2215 Daily

TMMTN – Thumb Mid-Michigan Traffic Net 147.30+ 2130
Mon - Sat

More information is available at <http://nts-mi.org/>. Come
join us on our traffic and public service nets.

Michigan ARPSC Activities January, 2017

SARs for January, 2017: WB8WKQ 282, K8ED 184,
WB8TQZ 64, N5MKY 55, WD8USA 52, K8RDN 46,
WD8MWD 46, K8BKM 9, WB8RCR 9, KC8NFN 8, WB8R 5,
N8OSL 4.

Total SAR reported: 764

Brass Pounder's League (BPL): None

Public Service Honor Roll (PSHR) January, 2017: KC8YVF
191, WB8R 185, WD8MWD 140, WB8RCR 139, WD8USA
125, N5MKY 120, WB8WKQ 110, WB8TQZ 110, K8ED 90,
K8RDN 86, KC8NFN 48, N8OSL 36, KE8BYC 31, KD8LSM
25.

Michigan Net Activity, January, 2017

Michigan Amateur Communications System 80, The
Michigan Net 71, Southeastern Michigan Traffic Net 65,
Michigan Traffic Net 52, Upper Peninsula Net 40, Great
Lakes Emergency and Traffic Net 16, Saginaw County
ARES Net 4, District 3 ARPSC Net 4, Northern Lower East-

ern Upper Peninsula Net 4, Michigan VHF Traffic Net 4,
Michigan Digital Traffic Net 2, Michigan Amateur Radio
Public Service Corps 2, Red Cross Net of Greater Grand
Rapids 1, Bay Area Regional Traffic System 1, Genesee
County ARPSC Traffic and Training Net 1, District 5 Hospi-
tal Net , Chelsea ARC Net , Branch County Emergency Net
, Luce County ARES Net , Michigan ARES D-Star net .

Total net traffic reported: 347

Volunteer Hours Dollar Value:

ARPSC: \$ 177,752

NTS: \$46,446

Total Dollar Value January, 2017: \$224,198

Please note that according to the just released 2016
ARES Volunteer Value by state, Michigan Amateurs pro-
vided more dollar value in services than any other state
and \$843,619 more than our nearest competitor
(Georgia). Congratulations to all who helped make this
possible.

A hearty thank you goes to the hundreds of volunteers
across the State of Michigan who work hard as volun-
teers to hone their skills month after month to make sure
they are ready for any situation that may arise. Our
ARPSC and NTS programs are an integral part of
AuxComm, which in turn is an integral part of the Michi-
gan Homeland Security Division.

73 until next month,

Larry, WB8R

Dales Tales

Greetings everyone, welcome to "Dale's Tales" for March 2017.

ARRL Great Lakes Division to hold Convention in October. The convention will be part of the new Great Lakes HamCon to be held at Michigan International Speedway (MIS) on October 7 & 8, 2017, HamCon promises to be an exciting event for ham radio in the ARRL Great Lakes Division. HamCon is sponsored by the Great Lakes Amateur Radio Association, a consortium of radio clubs in the Great Lakes Division.

There are currently 14 clubs who have joined the consortium and it is continuing to grow.

The HamCon event takes place in the infield of the MIS NASCAR® track, where there is room to park 5000 cars. Additional parking for cars and campers surrounds the track. HamCon will use "Pit Road" for the flea market trunk sales, while the three large infield buildings are committed for the vendor booths and inside tables. Advanced tickets, flea market spaces and booth rentals are expected to open for sale in mid-March. Planned events include a Wouff Hong Initiation, Ham-in-a-day class, FCC license testing, ARRL meetings, DX Forum, Contesting Forum, Fox Hunting Forum, and QRP Operating Forum with 10 more events still pending. As it becomes available, up-to-the-minute information will be posted on the web page at: GLHamCon.org

DXCC Card Checker Update. I have contacted all of the present Card Checkers in the Great Lakes Division in an effort to bring everything up to date. I am truly pleased to have received so many enthusiastic replies. So now, our records are up-to-date and we will move on towards filling some needed vacancies, primarily related to the wide geography these folks serve. We really need to fill some gaps with card checkers who are willing to visit hamfests and occasionally clubs to check cards. We do have some volunteers in the wings and are looking for a few more. If you would find this service interesting to you, please let me know soon, as I will be working with our three Section Managers and Division DX Clubs over the next couple of months to fill several available positions.

QSL Managers. A reminder to all who are active operators, keep your QSL manager up-to-date with envelopes or a

few green stamps so they can serve you faster and without any hassle. Talk with your manager to find out what his preferences are for the service he provides. Some like to supply the envelopes while some prefer the operators to provide them.

Discuss this with your QSL manager and you will really make his life easier.

TOM'S COMMENTS: Comments from our Vice Director Tom Delaney W8WTD

I'm sure there are January hamfests, but for me the "season" starts with the Mansfield Mid-Winter Hamfest in February. What a contrast in weather this year (mid-sixties) to a few years ago with sub-zero temps. We had a good forum up there, with lots of attendees and excellent discussion. One of those topics was the Entry Level License. I'm on that committee of the ARRL Board.

Besides getting feedback in person, the Committee has also set up an on-line survey to get members involved. You can find the survey on the ARRL website: <http://www.arrl.org/license-1> If you haven't already participated, I'd encourage you to tell us what you think.

As the introduction to the survey notes, "We were tasked with evaluating the current entry level license (Technician) and making any recommendations to the Board for possible rules changes to recommend to the FCC." At this point the committee has not made any recommendations, and we're only talking about possible rule changes.

Please keep that in mind when you respond. I'd like to point out that this effort is one of trying to keep amateur radio strong. How do we get new hams, and what do we need to do to keep them active? Changing the license requirements to reflect changes in operating, study habits, etc., if they are done at all, would be done with that in mind.

Remember the ARRL's Vision Statement: "To advance the art, science, and enjoyment of Amateur Radio."

Besides the survey, if you want to talk to me, find me at a hamfest or club meeting, send me an email or give me a call.

One more thing. The other day, in a conversation on a local repeater, I was talking with someone about how technology has improved our radios. But a bigger change in technology by far has happened in the video production industry, where I worked for the better part of forty years. The \$100,000 cameras we used thirty years ago were incapable of producing the quality pictures that a \$200 consumer camera can today!

I bring this up because recently I've had occasion to use some of my background (and my consumer-electronics gear) to produce some videos promoting ham radio. Which led me to wonder how many hams in our Division currently work, or have worked, doing video production. As those of you in the industry know, production is best when it is done as a team. Just look at the teams behind the scenes at the recent Oscars.

If you have experience in video and might be interested in some projects involving ham radio, let me know. We can "talk shop," and more importantly, maybe collaborate on some things that will promote our other big interest, ham radio.

73, Tom W8WTD Vice Director, Great Lakes Division

Here is the current Great Lakes Division ARRL Sanctioned Hamfest Schedule covering the next few weeks. These swaps have received their sanctioning approval from ARRL HQ at the time of this publication. We have approximately 65 ARRL hamfests each year in the Division. I do encourage each Hamfest Chair to register early for ARRL Sanctioning.

Be sure to invite your ARRL Officials as soon as your date is set.

Mar 4 - Cave City - Cave City, KY
 Mar 5 - NOARS - Elyria, OH
 Mar 11 - Lowell - Lowell, MI
 Mar 18 - Crossroads - Kalamazoo, MI
 Mar 18 - MOVARC - Gallipolis, OH
 Mar 19 - Toledo Mobile ARA - Perrysburg, OH
 Apr 1 - Portsmouth - Portsmouth, OH

Apr 2 - Lincoln Trail - Elizabethtown, KY
 Apr 8 - Cuyahoga Falls - Cuyahoga Falls, OH
 Apr 22 - Chassell - Chassell, MI
 Apr 29 - Jackson County - Jackson, OH
 Apr 30 - Athens - Athens, OH
 May 6 - Cadillac - Cadillac, MI
 May 19 - Dayton Hamvention - Xenia, OH

Be sure to check your Section's news pages for the latest local happenings, club and net information.

73, Let's be radio-active!

Dale Williams WA8EFK
 Director
 Great Lakes Division

ARRL PROPAGATION BULLETIN

QST de W1AW

Propagation Forecast Bulletin 9 ARLP009 From Tad Cook, K7RA Seattle, WA March 3, 2017 To all radio amateurs

On March 2 at 2353 UTC the Australian Space Forecast Centre issued a geomagnetic disturbance warning for March 3:

"The Earth is currently under the influence of a high speed solar wind stream from a recurrent coronal hole. On 3 March geomagnetic activity is expected to reach active levels. Isolated minor storm periods are also possible."

This reporting week (February 23 through March 1, 2017) sunspot and solar flux averages rose while geomagnetic indices remained about the same, compared to the previous seven days. Average daily sunspot numbers increased from 19.1 to 34.1, and average daily solar flux went from 78.5 to 81.3.

Average planetary A index barely changed from 11.3 to 13.1, and average mid-latitude A index (measured in Virginia) went from 9 to 8.7. The numbers went in opposite directions, but were each barely changed.

Predicted solar flux is 79 on March 3, 78 on March 4-5, 77 on March 6-7, 76 on March 8, 75 on March 9-14, then 74, 75, 77, 79, and 80 on March 15-19, 82 on March 20-23, 80 on March 24-25, 79 on March 26, 77 on March 27-28, 79 on March 29-31, 75 on April 1, 72 on April 2-3, 73 and 74 on April 4-5, 75 on April 6-10, and 74, 75 and 77 on April 11-13.

Predicted planetary A index is 22, 14, 10 and 8 on March 3-6, 5 on March 7-8, 8 on March 9, 5 on March 10-14 then 10, 20, 15, 10 and 8 on March 15-19, then 5, 8, 10, 15, and 8 on March 20-24, 5 on March 25-26, then 12, 25, 20, 15 and 8 on March 27-31, 5 on April 1-10, and 10, 20, 15 and 10 on April 11-14.

F.K. Janda, OK1HH sent this forecast:

"Geomagnetic activity forecast for the period March 3-28, 2017

"Geomagnetic field will be:

Quiet on March 8-9, 12, 14, 26

Mostly quiet on March 10-11, 13, 15, 25

Quiet to unsettled March 7, 20-22, 24

Quiet to active on March 3-4, 6, 16, 18-19, 23, 27 Active to disturbed on March 5, 17, 28

"Amplifications of the solar wind from coronal holes are expected on March 3-5, (6-8, 20-22,) 23-26.

"Remark: - Parenthesis means lower probability of activity enhancement and/or lower reliability of prediction."

We've been tracking a 3-month moving average of sunspot numbers for several years now. The peak was centered on February and March 2014, when the 3-month averages were 146.4 and 148.2. The average centered on the end of 2014 was 107.8, and a year later was 55.4. At the end of last year the average was 21, and the average centered on January 2017 was 20.6. The cycle will probably reach minimum in 2020.

Jon Jones, N0JK of Eastern Kansas sent this 10 meter update:

"The G2 class geomagnetic storm may have helped north - south paths.

The TX5T Austral Islands DXpedition was loud on 28.027 MHz and in my log with one call at 2045z March 2. This on my mobile station. I saw aurora contacts spotted on 6 meters March 1 such as N8JX EN64 to K9MU EN44 at 2038z."

"Good conditions continued on 10 meters this week. 10 open to Pacific" - N4EK March 2, 2118z.

Dr. Tamitha Skov issued this solar storm forecast video on February 23:

<http://bit.ly/2mNFO5g>

This weekend is the ARRL International DX SSB Contest. See <http://www.arrl.org/arrl-dx> for details.

If you would like to make a comment or have a tip for our readers, email the author at k7ra@arrl.net.

For more information concerning radio propagation, see the ARRL Technical Information Service web page at, <http://arrl.org/propagation-of-rf-signals>. For an explanation of numbers used in this bulletin, see <http://arrl.org/the-sun-the-earth-the-ionosphere>.

An archive of past propagation bulletins is at <http://arrl.org/w1aw-bulletins-archive-propagation>. More good information and tutorials on propagation are at <http://k9la.us/>.

Monthly propagation charts between four USA regions and twelve overseas locations are at

<http://arrl.org/propagation>. Instructions for starting or ending email distribution of ARRL bulletins are at <http://arrl.org/bulletins>.

Sunspot numbers for February 23 through March 1, 2017 were 18, 27, 25, 35, 40, 39, and 55, with a mean of 34.1. 10.7 cm flux was 83.3, 82.1, 80, 79, 82.2, 81.6, and 80.8, with a mean of 81.3. Estimated planetary A indices were 11, 20, 7, 2, 8, 8, and 36, with a mean of 13.1. Estimated mid-latitude A indices were 8, 15, 6, 0, 6, 5, and 21, with a mean of 8.7.

NNNN

ARRL DX NEWS

QST de W1AW
DX Bulletin 9 ARLD009
From ARRL Headquarters
Newington CT March 2, 2017
To all radio amateurs

This week's bulletin was made possible with information provided by W5AJ, QRZ DX, the OPDX Bulletin, 425 DX News, The Daily DX, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

TOGO, 5V. Franco, I1FQH will be QRV as 5V7V from the city of Kpalime from March 4 to 11. Activity is holiday style during his nights on 160 to 30 meters using mainly CW with some SSB on 40 meters. QSL via EA5GL.

BARBADOS, 8P. Tom, W2SC will be QRV as 8P5A in the ARRL International DX SSB contest as a Single Op/All Band/High Power entry. QSL direct to NN1N.

MALDIVES, 8Q. A group of operators are QRV as 8Q7LH from Himandhoo Island, IOTA AS-013, until March 9. Activity is on 80 to 10 meters, including 60 meters, using CW, SSB and various digital modes. QSL direct to DK8ZZ.

GHANA, 9G. Members of the Six G Team will be QRV as 9G5X from March 7 to 21. Activity will be on 160 to 10 meters using CW, SSB and RTTY with three stations active. QSL via M0OXO.

ANDORRA, C3. Members of the Andorran Amateur Radio Union will be QRV as C37NL in the ARRL International DX SSB contest as a Multi/2 entry. QSL via operators' instructions.

BAHAMAS, C6. A group of operators will be QRV as C6APY from Little Harbour Cay, IOTA NA-054, from March 4 to 11. Activity will be on 40 to 15 meters using CW and SSB with three stations. QSL via M0OXO.

SOUTH COOK ISLANDS, E5. Frank, DJ5NQ is QRV as E51ANQ from Rarotonga, IOTA OC-013, until March 24. Activity is on 20 meters using mostly CW. QSL to home call.

CANARY ISLANDS, EA8. Mischa, HB9EMP is QRV as EA8/HB9EMP from Fuerteventura until March 8. He is active on the HF bands using SSB, RTTY, JT65 and other modes. He plans to be active in the ARRL DX SSB contest. QSL to home call.

ANTARCTICA. Francois, F4HLT is QRV as FT3YL from the Dumont d'Urville Station Terre Adelie on Petrels Island, IOTA AN-017, until February 1, 2018. Activity is on 20, 15 and 10 meters using SSB and various digital modes in his spare time from 0900 to 1100z and after his work duties. QSL via F6KPO.



FRENCH GUIANA, FY. Look for FY5FY to be a Single Op/Single Band on 80 meter entry, and FY5KE to be a Single Op/Single Band on 15 meter entry in the ARRL International DX SSB contest. QSL via operators' instructions.

HONDURAS, HR. Dave, VE3VSM is QRV as VE3VSM/HR9 from Roatan Island, IOTA NA-057, until March 5. Activity is generally on 20 and 15 meters using CW with some SSB. This includes an entry in the ARRL DX SSB contest. QSL direct to home call.

SVALBARD, JW. Tom, LA6VDA is QRV as JW6VDA from Longyearbyen on Spitsbergen Island, IOTA EU-026, until March 22. Activity is on various HF bands using SSB. QSL to home call.

U.S. VIRGIN ISLANDS, KP2. Yuriy, N2TTA will be QRV as NP2P in the ARRL International DX SSB contest as a Single Op/All Band entry. QSL via LoTW.

LITHUANIA, LY. Special event station LY27W is QRV until March 31 to celebrate the 27th anniversary of the restored Independence of the State of Lithuania. QSL via LY5W. From March 11 to April 11, special event station LY27A will also be active. QSL via LY5A.

BELGIUM, ON. A group of operators are QRV with special event call OR100LCI during March to support the work of Lions Clubs International. QSL via ON8ZL.

ARUBA, P4. Robert, W5AJ is QRV as P40P until March 6. He will be a Single Op/All Band entry in the ARRL International DX SSB contest. Outside the contest he is active on the newer bands. QSL via LoTW.

SURINAME, PZ. Operators G4BVY, G4CLA and G4XUM are QRV as PZ5K until March 7. This includes being a Multi Op entry in the ARRL International DX SSB contest. QSL via G3NKC.

COSTA RICA, TI. Matt, K0BBC is QRV as T17/K0BBC from Las Villas del Guayabo until March 7. Activity is on the HF bands. This includes being an entry in the ARRL International DX SSB contest. QSL to home call.

KALININGRAD, UA2. Members of the UA2 Contest Club will be QRV as RW2F in the ARRL International DX SSB contest as a Multi/Multi entry. QSL via bureau.

ANTIGUA AND BARBUDA, V2. Alan, N3AD will be QRV as V26M in the ARRL DX SSB contest as a Single Op/All Band entry. QSL via W3HNC.

TURKS AND CAICOS ISLANDS, VP5. Glenn, W0GJ will be QRV as VP5H from Providenciales Island, IOTA NA-002, in the ARRL International DX SSB contest as a Single Op entry. He may be active as VP5/W0GJ before and after the contest. QSL via W0CG.

THIS WEEKEND ON THE RADIO. The ARRL International DX SSB Contest, NCCC RTTY Sprint, QRP 80-Meter CW Fox Hunt, NCCC CW Sprint, Wake-Up, QRP CW Sprint, Open Ukraine RTTY Championship, UBA Spring 80-Meter CW Contest, DARC 10-Meter Digital

CLASSIFIED

I have the following gear up for sale.

Kenwood TM-V71a, 2m/440 mobile - \$250

Yaesu VX-7R, 6m/2m/220/440 Submersible HT - \$200 including Heil headset.

Larsen NMO-2/70 mobile antenna -\$40

Jared

K8ABS ESTATE SALE

**SB104 \$310.00 SB604 plus AC power
Supply \$225.00 SB230 \$500.00+**

**MFJ Versa Tuner II-969 300 Watt
Asking \$185.00**

**Home Brew?? Collins Speaker Cabinet w/
Ant Switch & SWR Meter built in.**

**Above is Jim's operating station W/ Manu-
als MINT Asking \$950.00**



Icom 706 & AH-4 Auto Tuner Asking \$870.00

**Tenna Pyramid Phase III 13.8V / 10A Power Supply
Asking \$50.00**

Kenwood TM231A

Kenwood TW241A

Kenwood AT250 Tuner 100Watt

**Also have handhelds, will be procuring chargers
etc.**

**Contact Burt WB8EBS 1-906-774-8383 Have call-
er ID & Voice Mail.**



Space Available to push your stuff

LINKS AND STUFF

Under re-construction. Watch for the orange barrels

*Delta County Amateur Radio
Escanaba, MI
www.dcars.org*

*Cooper Country Radio Amateur
Dollar Bay, MI
www.ccras.net*

Area Repeaters

Escanaba 147.15+	100.0
	145.13- No PL
Wells 444.30+	No PL
Gladstone	
IRLP 4013 147.55 Smpx	100.0
Champion 146.82-	100.0
Cooks 146.70 -	110.9
GrdMarais 147.195+	No PL
Gwinn 146.64	100.0
Iron Mtn 146.85 —	100.0
Iron River 145.17-	107.2
Ishpeming 146.91-	No PL
IRLP 8993 443.50+	100.0
Manistique 146.79 -	No PL
Marquette 146.97 -	No PL
	147.27+ 100.0
	444.80+
	No PL
Menominee 147.00+	107.2
Newberry 146.61 +	No PL
	147.09+ 114.8
Republic 147.09+	No PL
Trenary 147.03 +	100.0
Wetmore 145.41-	100.0

ARRL Affiliated Club Area Nets

UP Net 3921khz
Daily 5pm EST
Sunday Noon EST

UP CW NET 3590khz
Sunday 7pm EST

160 Net 1895khz
Everynight 0100UTC
Dailey 0600UTC

Midcars 7258khz
Daily 0730am EST
0200pm EST

Outhcars Node 9614
Saturday 0900am EST

UP Echolink Node 9617
Sunday 8pm EST

Delta County ARES
147.150
Sunday 7pm EST

Mich-A-Con Social
146.850
Thursday 0630pm CST
ARES follows

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

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

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

Tropospheric Ducting Forecasts:
<http://www.d/infocentre.com/tropo.html>

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

FCC Universal Licensing System: <http://wireless.fcc.gov/uls/>

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

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

E Ham Net <http://www.eham.net/>

UP Skywarn: <http://kera-mi.net/skywarn/>

Band Conditons: <http://bandconditions.com/>

ABOUT OUR CLUB....**Club Officers****President:**

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

Vice President

Scott Jarmusch, KA8TFF

Secretary:

Joe Ferris, KC9TQR
irferris@borderlandnet.net

Treasurer:

Debbie Garbowski, KD8VTS
(906) 284 -2450
kd8vts@gmail.com

Editor:

Tom Heyboer, KC8TH
(906) 779-0481
Heyboer.tom@gmail.com

Web Editor:

Tom Heyboer, KC8TH
(906) 779-0481
Heyboer.tom@gmail.com

Radio License Exam Contact Persons:

Mike Boileau: 906 563 1350
 Terry Moriarity: 715 251 1670

Activities:

Second Wednesday of the month the Mich-A-Con Amateur Radio Club meets in the Dickinson Country Library at 7:00 P.M. Winter or 6:30 PM Summer

Visitors and prospective members are always welcome!

Club Repeater:

The Club maintains two repeaters which are located on Pine Mountain (Elevation 1650 ft) in Iron Mountain with tower and facilities provided by the Wisconsin Electric Power Co. The range of the 2 meter repeater is about 40 miles. The range of the 440 MHZ repeater is about 25 miles. Both are under normal conditions, depending upon terrain.

The Repeater Specifications:

The 146.85 repeater is a Yaesu DR 1 digital and Analog repeater Frequency. 146.85 minus offset, 100 hz PL tone encode and decode Power 50 watts. The Controller is an Arcom RC 210 . It is also System Fusion capable.

. The 440 MHZ repeater is a GE Master II 444.85, plus offset, 100 hz pl tone. 35 watts output. The Controller is a Arcom 210.

The 2 meter and the 440 can be linked. The repeaters share a Diamond dual band antenna at a tower height of 125 ft.

We're on the Web!

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

Previous editions of the Newsletter can be accessed by a link on the **news** page

From Your Newsletter Editor

Thank you to those contributors and critiques.
 Welcome your articles - They make the Newsletter.

For those not getting the Newsletter, it is because I have an incorrect email address. Please give me the correct address.

The following is referenced from <http://www.dx-code.org>

DX Code Of Conduct

I will listen, and listen, and then listen again before calling.

I will only call if I can copy the DX station properly.

I will not trust the DX cluster and will be sure of the DX station's call sign before calling.

I will not interfere with the DX station nor anyone calling and will never tune up on the DX frequency or in the QSX slot.

I will wait for the DX station to end a contact before I call.

I will always send my full call sign.

I will call and then listen for a reasonable interval. I will not call continuously.

I will not transmit when the DX operator calls another call sign, not mine.

I will not transmit when the DX operator queries a call sign not like mine.

I will not transmit when the DX station requests geographic areas other than mine.

When the DX operator calls me, I will not repeat my call sign unless I think he has copied it incorrectly.

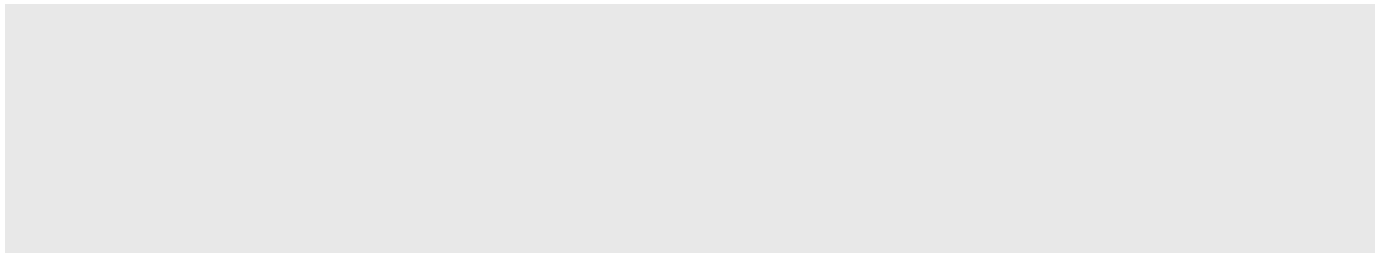
I will be thankful if and when I do make a contact.

I will respect my fellow hams and conduct myself so as to earn their respect.



MEMBERSHIP

Call Sign	Last Name	First Name	City	Phone	Email
WB8EBS	ARMBRUST	BURT	QUINNESEC	906-774-8383	wb8ebs@yahoo.com
W8XBO	ARMBRUST	ED	IRON MOUNTAIN	906-779-5593	w8xbo@sbcglobal.net
KC9KVP	BAKER	BETH	NIAGARA		
KB9AVX	BAKER	SCOTT	NIAGARA	715-251-1944	kb9avx@yahoo.com
KB8SBP	BERTOLDI	BILL	KINGSFORD		
W8BEY	BEY	DANA L.	KINGSFORD	906-774-7937	lst797@charter.net
K8DDA	BRAY	MIKE	VULCAN	906-201-1550	mikebray@chartermi.net
KE9L	CASWELL	SKIP	IRON MOUNTAIN	906-774-3371	acaswell4238@charter.net
KC8QZG	DAKE	DAVE	NEWBERRY		
KC9ZBC	DOLATOWSKI	SCOTT	GOODMAN	715-633-1006	kc9zbc@live.com
KC9TQR	FERRIS	JOE	FLORENCE	517-589-4386	jrferris@borderlandnet.net
N9MBG	FRY	ED	PEMBINE	906-221-7307	efry@centrylink.net
KG8NK	GEMBOLIS	LOUIS	ISHPEMING	906-485-5442	lgembolis@chartermi.net
KD8VTS	GRABOWSKI	DEBRA	CRYSTAL FALLS	906-284-2450	kd8vts@gmail.com
KD8VTT	GRABOWSKI	WILLIAM	CRYSTAL FALLS		
KC8TH	HEYBOER	TOM	IRON MOUNTAIN	906-779-0481	heyboer.tom@gmail.com
N8ATS	HOLMES	SAM	PEMBINE	906-322-8507	chopsam@centrylink.com
KA8TFF	JARMUSCH	SCOTT	IRON MOUNTAIN		
KB9EMU	KNUTSON	WILLIAM	FENCE	715-336-2250	dknutson54@gmail.com
KB8ETK	KOMBLEVICZ	JOSEPH	IRON MOUNTAIN	906-774-4094	kombleviczj@charter.net
W8JWN	MARTIN	THOMAS	IRON MOUNTAIN	906-774-5463	tmartin@chartermi.net
WA8FXQ	MEYERS	BOB	VULCAN	906-396-0119	meyersb@uplogon.com
KC8LRP	MEYERS	MARGE	VULCAN	906-396-8913	mgmeyer@uplogon.com
N8TUM	MILLER	TIMOTHY	FLORENCE	715-696-6517	timmiller.up@gmail.com
K9TRY	MORIARITY	TERRY	NIAGARA	715-251-1670	kb9zer@yahoo.com
ND8M	PAUL	JARED	NORWAY	989-660-9535	jaredpaul@me.com
KD8SZA	PAUL	MICHELLE	NORWAY		
KC9NFT	PERRON	BARRY	FLORENCE	715-696-6175	bperron2@netzero.com
KC8JRI	REED	GORDY	IRON MOUNTAIN	906-779-1254	gordyreed@charter.net
K8ABS	RIVERSIDE	JIM	IRON MOUNTAIN	906-458-0773	jriverside@charter.net
W8IFI	RYE	JIM	CRYSTAL FALLS	906-875-3582	jimrye@up.net
KG9Y	THOMAS	DAVE	NIAGARA	715-251-1393	ke9y@arrl.net





MICH - A - CON

Please remit dues to:

**Debbie Garbowski, KD8VTS
203 Camp 5 Road
Crystal Falls, MI 49920**

Name: _____

Call Sign: _____

Address: _____

City, State, Zip: _____, _____, _____

Email Address: _____

Phone: _____

ARRL Member? Yes _____ No _____

Please make check payable to: **Mich-A-Con ARC**

Annual dues for Full Membership -

Single \$20 __ Family \$30 __ Repeater Only \$10 __

If family membership, please list additional:

Names: _____

Call signs: _____

City, State, Zip: _____

Annual dues are Payable January 1st.

Dues for New Members are Pro-rated. Please remit \$1.67 per month for a Single membership or \$.50 per month for a Family membership.