



ARES COMMUNICATOR

Information for Scott County Amateurs



July, 2019

Accurate, Reliable Emergency Communications for our Community

Volume 19, Number 7

Field Day: Over 3,000 logs!

The 30-day deadline to submit ARRL Field Day entries via app upload and (timely postmarked) USPS mail is now past, and the ARRL Contest Branch reports 3,070 entries have been logged into the system. Last year saw 2,903 entries. ARRL Radiosport and Field Services Manager Bart Jahnke, W9JJ, said the total does not include entries postmarked by July 23 and still in transit. A number of entries still show a status of “PENDING.”



These include 280 incomplete entries that are missing the required list of call signs by band/mode (also known as a “Dupe Sheet”), or a Cabrillo file.

“This requirement is to ensure that claimed contact totals do not include duplicate contacts on the same band and mode,” Jahnke said. “These entries, if not complete, may end up as check logs in the final listings.”

An additional 191 entries are missing something *other* than Dupe Sheets. “These entries are complete,” Jahnke explained. “Their scores at present are not benefitting from certain bonuses, for which documentation is still outstanding,” he said. “Confirmation for entries submitted online using the web app include a link to update your entry.

If ARRL generated the entry from paper, or if you are unable to update your entry, submit pending documentation

Field Day *cont'd on page 2*

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“Happy 150!”

Hiram Percy Maxim Birthday Celebration

This year marks the 150th anniversary of the birth of ARRL’s first president and cofounder Hiram Percy Maxim (HPM), W1AW, born on September 2, 1869. ARRL will hold an operating event to celebrate HPM’s legacy, getting under way at 0000 UTC on August 31, and continuing until 2359 UTC on September 8. The event is open to all radio amateurs.

The goal is straightforward: Contact as many participating stations as possible. W1AW and *all* ARRL members will append “/150” to their call signs during this event (DX operators who are ARRL members may identify as <call sign>/150, if permitted by their country of license.) Participating stations will exchange signal report and ARRL/RAC Section. DX stations will send signal report and “DX.” Those taking part may use all Amateur Radio bands, *excluding* 60, 30, 17, and 12 meters.

Permitted modes: CW, phone (any voice modes), and digital. Submit Cabrillo log or ADI files. ARRL will calculate all final

Happy 150 *cont'd on page 3*

ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, July 13th

Digital Monday, July 15th

ARES Nets		
MN ARES Phone Net	6:00PM Sunday	Freq: 3.860 mhz
ARRL MN Phone Net	12:00p, 5:30p CST Daily	Freq: 3.860 mhz
ARRL MN CW Net	6:30p, 9:50p CST Daily	Freq: 3.568 mhz
NETS WITH OUR NEIGHBORS		
North Dakota:	Daily 3.937 mhz	6:30pm
South Dakota:	Daily 3.860 mhz	6:00pm
Wisconsin:	Daily 3.985 mhz	5:30pm
Iowa:	Daily 3.970 mhz	12:30/5:30pm

Field Day - cont'd from page 1

via email, and the Contest Branch will update your entry, assuming that documentation/photos confirm the bonus

points claimed.”

Updates are permitted until August 23.

After that, all entries as of that moment will be considered final. Results will appear in the December 2019 issue of *QST*. Jahnke encouraged



A young visitor to the Boulder Amateur Radio Club's W0DK Field Day site in Colorado makes his first contact on ham radio. This 3A operation was beset by rain and cool to chilly temperatures.

groups to separately submit photos with captions for possible inclusion in *QST*. Individuals should be identified by names and call signs, and any subject younger than 18 years old will require a signed publication release. Photos should have a minimum resolution of 250 kB.

BREAK - OVER

Test Your NIMS Knowledge

This month we begin our review of ICS-800C, An Introduction to National Incident Management System. The goal of IS 800C is to familiarize participants with the National Response Framework and the ways it is applied in actual response situations.

Check your recall of the course material with this question.

1. A basic premise of the National Response Framework is that:
 - A. Incidents should be managed at the lowest jurisdictional level possible.
 - B. Unity of effort results when responding agencies are willing to relinquish their authorities.
 - C. Readiness to act encourages response partners to self-dispatch to an incident scene.
 - D. Response partners use nonstandard structures to allow for flexible and scalable responses.

Check next month's ARES Communicator for the solution



June NIMS Knowledge Solution

1. The National Response Framework is:
 - D. Part of the larger National Strategy for Homeland Security.



NBEMS Current Versions

The current version of the Fldigi manual is available at NBEMS Info page at www.scottares.org. Look under the 'Help Sheets' heading.

Now is a good time to check to your digital software to make sure you are running the newest versions. You can find the most recent versions posted at both: www.w1hkj.com/ and www.scottares.org/NBEMS.htm

Here are the most recent releases as of July 20, 2019.

Software	Version
Fldigi	4.1.06
Flwrap	1.3.4
Flmsg	4.0.11
Flamp	2.2.05

The Monday evening training net is a great place to have your digi questions answered and problems solved! Join the Scott ARES group on 146.535 MHz simplex at 7:00pm on Monday evenings.



Scott County ARES Contacts

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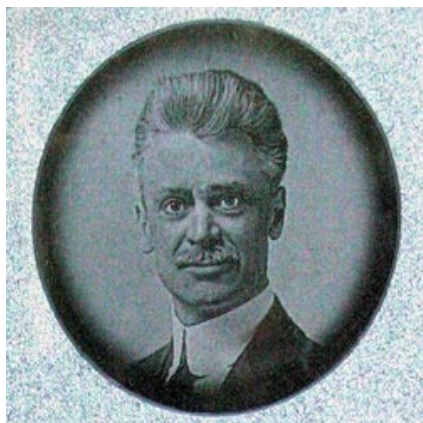
Asst Emergency Coordinator
 Chad Palm KD0UWZ
 Chaska, MN
 KD0UWZ at scottares.org



Happy 150 - cont'd from page 1

scores based on participants' uploads to the ARRL event web app (link not yet active).

The 84 available multipliers only count once. These include the 83 ARRL/RAC Sections (RAC Sections include the Canadian Northern Territories, encompassing VE8, VY1, and VY0) and DX. The W1AW operating schedule during this



period may be adjusted as necessary to accommodate on-air celebration operating activities. Contacts with W1AW/150 will earn 3 points each. Contacts with any ARRL member will earn 2 points each. These stations will also identify as *<call sign>/150*. Contacts with nonmembers will earn 1 point each.

Participants can earn 150 bonus points by:

- Contacting W1AW/150 on each band and mode.
- Uploading entries (ARRL members only).
- Using social media to publicize this event and/or participation before, during, and/or after the event.
- Operating with 5 W PEP output or less throughout the event.
- Making at least 20 contacts while operating portable.
- Completing at least 150 contacts.

Online certificates will be awarded, and are available via download <http://contests.arrl.org/certificates.php> only. Updates and results will be publicized www.arrl.org/hpm150-birthday-celebration.

There are no power or operator categories. Participating ARRL members who use Logbook of The World (LoTW) are encouraged to create a separate LoTW certificate for uploading *<call sign>/150* contacts. Members then should upload logs for this event using their /150 certificates. Submissions must be via the online web app. No email or paper submissions will be accepted.

BREAK - OVER

Global Digital DX Contest

Slovenia Contest Club and WWROF

The World Wide Radio Operators Foundation (WWROF), in collaboration with the Slovenia Contest Club (SCC), has announced the World Wide Digi DX Contest (<https://ww-digi.com/>), which it hopes will become an annual event. The inaugural running of the 24-hour contest will take place on August 31 – September 1. The new contest aims to tap into the enthusiasm being generated by the new digital modes pioneered by Joe Taylor, K1JT, and the *WSJT-X* Development Group.



Participants will use FT4 and FT8 on 160, 80, 40, 20, 15, and 10 meters. The WW Digi will utilize a distance-based scoring system, with participants earning points based on the distance between grid square centers of the two stations in a given contact.

“This will encourage operators to seek out long-distance, weak-signal contacts that highlight the technical advantages of the new digital modes,” WWROF’s announcement said.

To encourage activity across all bands, each new two-character grid field contacted on each band will be a multiplier. The final score will be the product of total contact points and grid *field* contacts. Single-operator and multioperator entries are invited to take part.

“The contest has been designed to enable making contacts utilizing standard *WSJT-X* software behavior, making it easy for non-contesters to participate,” the announcement said. “At the same time, the contest supports some new techniques that will encourage operating innovation, such as permitting stations to work up to three ‘QSO streams’ on a band at one time. Robotic operation is specifically prohibited in order to keep the human element as part of the game.”

Plaques will be awarded to top scorers. (Contact WW Digi Contest Director Ed Muns, W0YK, to sponsor an award.) Downloadable electronic certificates will be available for anyone who submits a log. WWROF plans to have results available within 90 days of the contest’s conclusion.

WWROF is dedicated to improving the skills and fun of Amateur Radio operators around the world by utilizing education, competition, advancement of technology, and scientific research, promoting international friendship and goodwill. It is a nonprofit, donor-supported organization.

BREAK - OVER

Major *WSJT-X* Upgrade for HF Contesting

The WSJT Development Group has announced the “general availability” release of *WSJT-X* version 2.1.0. This major upgrade formally introduces FT4 as “a finished protocol for HF contesting.” Users have been advised to discontinue using any “release candidate” (beta) versions of the software that *WSJT-X* version 2.1.0 supplants.



The latest edition of the popular digital software suite also includes improvements and bug fixes in several areas, including FT8. The list includes:

- FT8 waveform generated with GMSK and fully backward compatible
- User options for waterfall and spectrum display
- Contest logging
- Rig control
- User interface

The WSJT-X Development Group is providing a separate *WSJT-X* version 2.1.0 installation package for 64-bit Windows that offers significant improvements in decoding speed.

A detailed list of program changes since *WSJT-X* version 2.0.1 is included in the cumulative release notes. Upgrading from earlier versions of *WSJT-X* should be seamless, with no need to uninstall a previous version or to move any files.

Installation packages for Windows, Linux, and Macintosh are available.

WSJT-X is licensed under the terms of Version 3 of the GNU General Public License (GPL). “Development of this software is a cooperative project to which many Amateur Radio operators have contributed,” said Joe Taylor, K1JT, for the WSJT Development Group. “If you use our code, please have the courtesy to let us know about it. If you find bugs or make improvements to the code, please report them to us in a timely fashion.”

Some users have reported a low audio level to the transmitter when using the 64-bit Windows version, which required greatly increasing the sound card Playback device used to feed audio to the transmitter.

Visit the FT8/FT4/JT9: WSJT 2-Way Narrow Modes for Amateur Radio Facebook page for additional information.

New 8-Meter Band?

The FCC has put on public notice for comment a *Petition for Rulemaking* (RM-11843) that seeks the creation of a new 8-meter Amateur Radio allocation on a secondary basis. The *Petition* suggests the new band could be centered on an industrial-scientific-medical (ISM) segment somewhere between 40.51 and 40.70 MHz. The spectrum between 40 and 41 MHz is currently allocated to the Federal Government and, as such, within the purview of the National Telecommunications and Information Administration (NTIA). ARRL member Michelle Bradley, KU3N, of Maryland, filed the *Petition* in May on behalf of REC Networks, which she founded and described in the *Petition* as “a leading advocate for a citizen’s access to spectrum,” including Amateur Radio spectrum.

“REC feels that the time is right for the Commission to open a *Notice of Inquiry* and eventually a *Notice of Proposed Rulemaking*, and in cooperation with the NTIA, this new band opportunity can be realized to spark the next generation of ‘makers’ in the fields of science, technology, education, and math (STEM), especially women and girls,” Bradley told the FCC in the *Petition*. “The more opportunities we give to make things, the more opportunities we have to build a pool of experts in STEM, right here at home.”

The *Petition* said the objective of a new band would be “an effort to foster experimentation into the propagation characteristics of this band midway between the 10- and 6-meter bands.” An allocation in the 8-meter band is available to

New Band *cont'd on page 5*

First Thursday Net

Metro District Hospital Net

The Metro District ARES Hospital net is held on the first Thursday of each month. The purpose of the net is to provide an opportunity to exercise Dual-band xcvrs installed at hospitals and clinics in the metro area. The net is open to all amateur radio ops and provides the opportunity to participate in a directed net and practice directed net procedures.

Everyone is welcome!

- First Thursday of each month
- 12:30PM (lunch time)
- 146.700 - (PL118.8)



Public Service Events



AUGUST

August 3rd

Tour De Tonka –
7 AM – 12-Noon
28 Mile Course Carver/Orono
Sign up at ARES.MN.org

August 3rd

Waseca Sprint Triathlon – Waseca Radio Club/
Waseca, MN –
Clear Lake Park 8 AM
Contact: Jon, WB0ZFH@hotmail.com

August 10th

Gaylord Extravaganza -
5K Run, Parade and Fireworks
Saturday 8 AM

August 18th

North Mankato Triathlon
Sunday, - 8 AM
Contact Steve/ k2kln@arrl.net

Served Agency Interest?

There has been discussion recently regarding renewed interest by the metro hospitals in considering the possible use of amateur radio as an option.

In the wake of the 911 attack the Department of Homeland Security's recommendations included the utilization of amateur radio in emergency communications plans.

Amateurs demonstrated their ability to link incompatible organization communication systems during disaster response. This feature along with the cost (free), availability, and existing networks contributed to amateur radio's attractiveness.

Most of the hospitals in the Metro area, through the Hospital Compact were awarded the funds to make a group purchase of dual-band VHF/UHF transceivers and dual-band antennas. Scott ARES provided installation assistance and troubleshooting to put the stations at St. Francis Regional Health Center and Queen of Peace Hospital on the air.

Originally the stations were operated on a monthly basis by ham-licensed hospital employees over their lunch break. The hospitals coordinated with local ARES groups to varying degrees.

If you would like to become involved more closely with a local hospital if their interest is renewed, please contact Bob, N0BHC@ScottARES.org.

Take a Dip in the General Pool

Time to test your knowledge of the information covered by the General Class license exam. Each month we'll take a look at a selection from the question pool.

Strap on your thinking cap and see what you can recall. Here is this month's sample:

1. Which of the following is a characteristic of a liquid crystal display?
 - A. It requires ambient or back lighting
 - B. It offers a wide dynamic range
 - C. It has a wide viewing angle
 - D. All of these choices are correct
2. Which of the following components are used in a power-supply filter network?
 - A. Diodes
 - B. Transformers and transducers
 - C. Quartz crystals
 - D. Capacitors and inductors
3. Which of the following is an advantage of using the binary system when processing digital signals?
 - A. Binary "ones" and "zeros" are easy to represent with an "on" or "off" state
 - B. The binary number system is most accurate
 - C. Binary numbers are more compatible with analog circuitry
 - D. All of these choices are correct

(Check next month's issue of the ARES Communicator for the answer.)

New Band- cont'd from page 4

radio amateurs in Ireland, where the Irish Radio Transmitters Society has developed a band plan for 40 - 41 MHz.

"REC perceives this spectrum can be used for weak signal experimentation and eventually general amateur use, especially along transatlantic paths using CW, SSB, digital modes such as FT8 and digital voice," the *Petition* said. "As no radios are mass-produced for this band at this time, this opens up new opportunities for 'makers' to construct transmitters, receivers, and antenna systems that can be used in this spectrum."

BREAK - OVER

June General Pool Answers

1. What is meant when memory is characterized as "non-volatile"?
 - C. The stored information is maintained even if power is removed
2. How is an LED biased when emitting light?
 - D. Forward Biased
3. What is the peak-inverse-voltage across the rectifiers in a full-wave power supply?
 - C. Double the normal peak output voltage of the power supply

BREAK - OVER

Amateur Radio License Exam

Want to become a ham? Want to upgrade your license? You can find information and resources to success in ham radio at this page: <http://www.scottares.org/License Info.htm>
If you want to ask questions or find a local Elmer (Mentor) just drop an email to: newhaminfo@scottares.org

The hams in Scott ARES gather for breakfast the first Saturday of the month at the Perkins Restaurant in Savage. Bring you ham radio questions and talk to local amateur radio operators.

Now that you have done the work to study for your upgrade, here is where to find a convenient exam session near you. There is a VE exam search engine at: http://www.arrl.org/exam_sessions/search

Walk-ins allowed at most sessions however it is always best to check the details at the specific session you are planning to attend. Below is a list of scheduled sessions close to Scott County. Good Luck!

August 14, 2019 Wednesday 7:00 PM

Sponsor: VARC
James C. Rice (612) 384-7709
Email: jrice@danpatch.org
Location: Perkins Restaurant & Bakery
17387 Kenyon Avenue
Lakeville MN 55044-4459
Walk-ins allowed, Pre-reg requested

August 17, 2019 Saturday 9:00 AM

Sponsor: SEMARC
Daniel M. Franz (651) 769-0358
Email: wd0gup@hotmail.com
Location: Zion Lutheran Church
8500 Hillside Trail South
Cottage Grove MN 55016
Walk-ins allowed, Pre-reg requested

September 11, 2019 Wednesday 7:00 PM

Sponsor: VARC
James C. Rice (612) 384-7709
Email: jrice@danpatch.org
Location: Perkins Restaurant & Bakery
17387 Kenyon Avenue
Lakeville MN 55044-4459
Walk-ins allowed, Pre-reg requested

September 21, 2019 Saturday 9:00 AM

Sponsor: SEMARC
Daniel M. Franz (651) 769-0358
Email: wd0gup@hotmail.com
Location: Zion Lutheran Church
8500 Hillside Trail South
Cottage Grove MN 55016
Walk-ins allowed, Pre-reg requested

Monday Evening 7PM

The Scott ARES net meets every Monday evening at 7:00 PM either on 146.535 simplex or on the first Monday of the month the WBORMK repeater 147.165 (PL 107.2).

The net is in a directed net format and provides the opportunity to practice working in an emergency net style.

There is help available in setting up and using NBEMS digital messaging software and generally a weekly digital message for practice.

Everyone is welcome to check in and contribute two cents worth!

*There is so much good in the worst of us,
and so much bad in the best of us,
that it hardly becomes any one of us
to talk about the rest of us.*

A. Nony Moose



ARES Breakfast

Saturday
August 10th 2019
7:30AM
**Hy-Vee Market Grille,
6150 Egan Dr, Savage, MN**

NECOS Schedule August 2019

The first Monday or the month the net is held on the WBORMK repeater, Carver. You will find WBORMK here: 147.165/765 PL 107.2

The NECOS script is on the Scott ARES website: www.scottares.org/Member Resources.htm

Date NECOS _____

July 29th - N0BHC Bob

August 2019

Aug 5th - WA0DGW John First Mon. Net

Aug 12th - KD0UWZ Chad

Aug 19th - N0BHC Bob

Aug 26th - WA0DGW John