



ARES COMMUNICATOR

Information for Scott County Amateurs



July, 2017

Accurate, Reliable Emergency Communications for our Community

Volume 17, Number 7

2017 NA QSO Parties

- RTTY July 16th
- CW Aug 5th
- SSB Aug 20th

There is some great North America contesting coming during July and August. Pick your mode: CW, RTTY, SSB and tune up your station for some summer operating fun.

The object of the contests is to work as many North American stations as possible during the contest period. The dates and times for the individual contests are as follows:

RTTY: 1800 UTC July 15 to 0600 UTC July 16, 2017

(third full weekend in July)

CW: 1800 UTC August 5 to 0600 UTC August 6, 2017

(first full weekend in August)

SSB: 1800 UTC August 19 to 0600 UTC August 20, 2017

(third full weekend in August)

There are two basic operator classes: a) Single Operator, b) Multi-operator Two-Transmitter. Within these classes there are two power classes: High Power: Max of 100 W from the output of the final amplifier and QRP: 5 W maximum.

Operating frequencies include six bands: 160, 80, 40, 20, 15, and 10 meters only, except no 160 meters for the RTTY contest. Suggested frequencies are 1,815, 3,535, 7,035, 14,035, 21,035 and 28,035 kHz (35 kHz up from band edge for Novice/Tech) on CW; and 1,865, 3,850, 7,225, 14,250, 21,300, and 28,500 kHz (28,450 kHz for Novice/Tech) on SSB.

Operators exchange the operator name and station location (state, province, or country) for North American stations or operator name only for non-North American stations.

The contact score multipliers for contest scoring are: all 50 US states, including Alaska and Hawaii, and the District of Columbia, and the 13 Canadian provinces/territories.

The place to go for more info on log reporting and team effort is The National Contest Journal at: <http://ncjweb.com/>
Start practicing - CQ NA TEST CQ NA TEST de — K!

BREAK - OVER

The ARES COMMUNICATOR is published for the benefit of Amateur Radio Operators in Scott County and other interested individuals.

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New FT8 Mode

WSJT-X Beta Release

ARRL Letter

WSJT-X is an open-source program developed by Joe Taylor, K1JT, designed for weak-signal digital communication by amateur radio. Normal usage requires a standard SSB transceiver and a personal computer with soundcard, or the equivalent.

WSJT-X Version 1.8.0 includes a new mode called FT8, developed by K9AN and K1JT. The mode name "FT8" stands for "Franke and Taylor, 8-FSK modulation". FT8 uses 15-second T/R sequences, provides 50% or better decoding probability down to -20 dB on an AWGN channel, and maintains good performance on Doppler-spread fading channels. An auto-sequencing facility includes an option to respond automatically to the first decoded reply to your CQ. FT8 QSOs are 4 times faster than those made with JT65 or JT9. FT8 is an excellent mode for HF DXing and for situations like multi-hop E_s on 6 meters, where deep QSB may make fast and reliable completion of QSOs desirable.

A beta release of WSJT-X, (<https://physics.princeton.edu/pulsar/k1jt/wsjsx.html>) version 1.8.0-rc1, including the new FT8 mode, featuring a faster turnaround, is already showing up on the bands.

FT8 cont'd on page 2

ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, August 12th

Digital Monday, August 14th

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

FT8 - cont'd from page 1

The beta WSJT-X also offers a new mode for accurate frequency calibration of your radio, improved CAT radio control, and enhanced JT65, QRA64, and MSK144 decoder performance. According to *The Daily DX*, on July 11, Frank Donovan, W3LPL, reported what he called “lots of semi-rare DX activity” using the new FT8 mode. He mentioned A92AA Bahrain, OY1DZ Faroe Islands, VR2XMT Hong Kong, and YE2IJ Indonesia, on 40 meters, and TR8CA Gabon, and YI3WHR Iraq, on 20.

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First Thursday Net

Metro District Hospital Net

The Association of Emergency Radio Organizations (AERO) sponsors a Metro District ARES net 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!

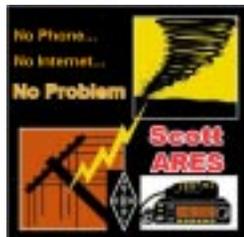
- First Thursday of each month
- 12:30PM (lunch time)
- 146.700 - (PL118.8)

Scott County ARES Contacts

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



More 5Mhz Activity

3 Countries added to the band

Amateurs in Belize, Cyprus, and the Philippines now have access to 60-meter bands.

In Belize, a secondary allocation of 5,351.5 to 5,366.5 kHz has become available with a maximum EIRP of 25 W.

The Cyprus telecoms regulator, the Department of Electronic Communications, on June 30 updated the national frequency table to include the new WRC-15 secondary allocation of 5,351.5 to 5,366.5 kHz with a maximum EIRP of 15 W, as well as the secondary MW allocation of 472 to 479 kHz, with a maximum EIRP of 1 W.

The Philippines Telecom Regulator, the National Telecommunications Commission, has granted amateur access to 5,351.5 to 5,366.5 kHz under ITU footnote 5.133B, with a maximum EIRP of 15 W.

BREAK - OVER



Happy Independence Day

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.w1hjk.com/download.html and <http://www.scottares.org/NBEMS.htm>

Here are the most recent releases as of July 18, 2017.

Software	Version
Fldigi	4.0.7
Flwrap	1.3.4
Flmsg	4.0.3
Flamp	2.2.03



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.

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!

July 15, 2017 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

July 24, 2017 Monday 6:00 PM

Sponsor: SMARTS
Dale A. Blomgren (952) 402-2155
Email: kdzerob@aol.com
Location: Carver County Library
7711 Kerber Blvd
Chanhassen MN 55317
Walk-ins allowed, Pre-reg requested

August 9, 2017 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 19, 2017 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

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. What is the approximate open-circuit voltage from a modern, well-illuminated photovoltaic cell?
A. 0.02 VDC
B. 0.5 VDC
C. 0.2 VDC
D. 1.38 VDC
2. What unit is used to measure reactance?
A. Farad
B. Ohm
C. Ampere
D. Siemens
3. Which of the following describes one method of impedance matching between two AC circuits?
A. Insert an LC network between the two circuits
B. Reduce the power output of the first circuit
C. Increase the power output of the first circuit
D. Insert a circulator between the two circuits

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

BREAK - OVER



"A body of men, holding themselves accountable to nobody, ought not to be trusted by any body."

Thomas Paine, American Patriot



June General Pool Answers

1. What is the name of the process by which sunlight is changed directly into electricity?
B. Photon emission
2. What is the reason a series diode is connected between a solar panel and a storage battery that is being charged by the panel?
B. The diode prevents self discharge of the battery though the panel during times of low or no illumination
3. How does a capacitor react to AC?
A. As the frequency of the applied AC increases, the reactance decreases.

ILLW

Aug 19-20

Light up the bands!

Registrations for the 2017 International Lighthouse Lightship Weekend have topped the 200 mark for the August 19-20 event. The ILLW is 20 years old this year, and with a bit more than 6 weeks to go, nearly 250 planned operations have registered throughout the world. During the annual event, Amateur Radio stations will be on the air from — or in the immediate vicinity of — various historic lighthouses and lightships in more than 25 countries. In past years, more than 500 stations in some 90 countries have taken part.

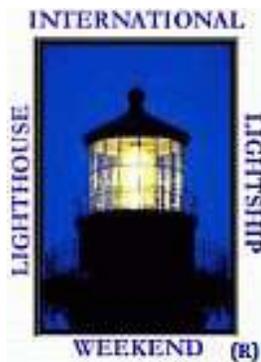
“Many enjoy linking portable Amateur Radio to the navigational beacons for shipping traffic of the past, and in doing so, help raise public awareness of the need to preserve the old structures,” Jim Linton, VK3PC, remarked.

The Polish DX Club will mark the milestone anniversary as 3Z20ILLW, with six club members at the Jaroslawiec Lighthouse, Poland’s oldest, on the Baltic Sea. In West Malaysia, the Borneo Amateur Radio Club will activate Tinagat Lighthouse for its first time, as 9M6SDX.

Registration guidelines call for operating sites to be officially listed as aids to navigation. That could include a classic lighthouse or lightship with a Fresnel lens, fog horns, time ball towers, and lighthouses or lightships moved to museums. According to the ILLW site, “lights such as range lights, channel markers, skeletal towers, and breakwall lights will probably not be accepted.” Registration for the event is not required, but it does let other participants know which lighthouses and lightships will be active.

Sponsors stress that the event is *not* a contest — and there are no prizes, certificates, or other enticements to participate. Each station’s operators decide how they will operate their station with respect to bands and modes, and participating stations do not have to be on the air for the entire weekend.

Activity does not need to take place inside the structure itself. A Field Day-style setup at the light or other building adjacent to the light is sufficient. “Adjacent means next to or as close as possible,” event guidelines explain. “The intention behind this requirement is that the station should have a visible presence to the passing public who may be visiting the lighthouse over the weekend. Permission to operate from a lighthouse/lightship should be obtained from the relevant authorities.” More information here: <https://illw.net/>



Documented?

ARRL Letter - John Bloodgood, KD0SFY

Most of us hate paperwork. That being said, anyone who has ever held a position of leadership, be it in the military or in a company, or just from our own personal lives knows that paperwork, especially reports, have to be done. In the Amateur Radio community, everyone knows that to score on Field Day, get a Worked All States (WAS) certificate, or to get a QSL card, you have to do some reporting, even if it is electronic. In ARES, it is no different, and it is perhaps even more important.

Here is a scenario: You are lobbying for a new law regarding antenna restrictions or to use radios while driving. One of the selling points may be that the Amateur service can be critically valuable during disasters and emergencies. If you have never compiled hard data on how many operators there are in your area or have signed up for ARES, if you have never logged how many person-hours your area contributes each year to the community, and so forth, then you are just making unsubstantiated claims. Maybe you will have a couple of anecdotal examples, but they don't paint much of a picture. As they used to say in school, "Anecdotes are not data!" So, compile the reports and data now and continually.

In ARES, we have several reports that need to be filed, including event reports, monthly reports, and annual reports. Event reports are the *ARES Form 1 "Public Service Activity Report"* and *Form A and B "Simulated Emergency Test Report."* These should be completed and filed within a few days of any kind of ARES support for a public service event, emergencies/disasters, severe weather, or even exercises/training and an SET. The Form 1 is very important to fill out as it will help the local Emergency Coordinator and District Emergency Coordinator compile and complete their monthly reports as well as alert the ARRL HQ staff to any high interest events that they may want additional information about; for example, an ARES response to a local tornado breakout.

The monthly reports include the *ARES Form 2 "Monthly DEC/EC Report"* and *ARES Form 4 "Monthly Section Emergency Coordinator Report."* These reports provide a snapshot of your number of members, how much training you have done, how many operations you supported, and the number of volunteer hours expended during the month. These data are crucial for the ARRL leadership as they give hard numbers to use for spectrum defense, changes to laws, and so on.

The *ARES Form 3 "EC Annual Report"* is similar to the monthly report, but it focuses primarily on membership to help the Section EC understand the capabilities of each district or area in their jurisdiction.

All of the reports should be sent to the SEC, though some, like the Form 1, can be sent directly to the ARRL as well. It is

Surf's Up!

Surfing the web for interesting topics related to radio, building, computing, and anything else interesting along the way.

Soldering small ICs - VERY SMALL!!!

<https://www.youtube.com/watch?v=LSy3r85QB4E&feature=youtu.be>
A great video on how to solder small IC's by Colin G4KLB.

Learn how to solder surface mount components. The process is not difficult or impossible. This video takes you through the process and shows how to correct mistakes

BREAK - OVER



Documented - cont'd from page 4

the SEC's responsibility (ref section 1.2, *ARES Manual*, 2015 < <http://www.arrl.org/files/file/Public%20Service/ARES/ARESmanual2015.pdf> >) to make sure the reports are being filed and to ensure that accurate reports are compiled and sent to the ARRL. There are over 70 sections and most are subdivided to districts and local areas, so you can imagine the nightmare of having just a couple of staffers at ARRL HQ trying to compile reports from every EC and DEC. This means not only do the SECs need to see these reports for their own awareness, but also to compile summaries to reduce the number of reports being sent to ARRL HQ.

While most of the reports originate at the EC/DEC level (ref section 1.3 and 1.4, *ARES Manual*, 2015), if the SEC does not file the section reports or ensure EC/DEC reports are being filed, then the ECs and DEC's have little reason or motivation to file their reports. There are even cases where ECs and DEC's are not even aware that there are reports or that they are responsible for reporting, simply because the SEC never told them and never asked for any reports.

All forms can be found on the ARRL website at <http://www.arrl.org/public-service-field-services-forms> The ARRL has also hosted some webinars to help explain why and how these forms are used, and how to fill them out. See the ARES Forms webinar archived on YouTube here: <https://www.youtube.com/watch?v=vfUVvOYsTu0>

The bottom line is the old adage, "If you don't document it, it never happened."

BREAK - OVER

Test Your NIMS Knowledge

This month we begin our review of ICS-200. This course is designed to enable personnel to operate efficiently during an incident or event within the Incident Command System (ICS). ICS-200 provides training on and resources for personnel who are likely to assume a supervisory position within the ICS.

Check your recall of the course material with this question.

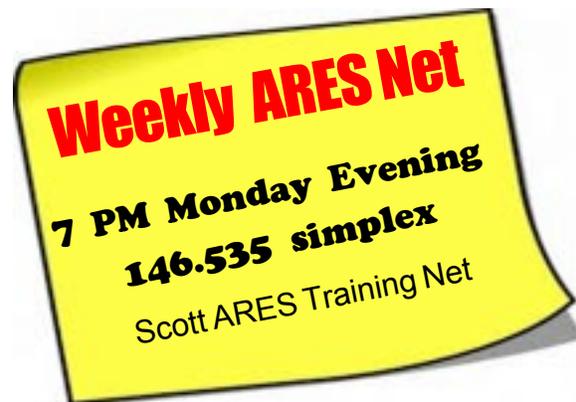
1. An individual assuming the role of the Deputy Incident Commander must:
 - A. Be a representative of the jurisdiction at the incident
 - B. Have served as a Branch Director within the current organization
 - C. Have prior experience predicting workloads and potential staffing needs
 - D. Be equally capable of assuming the Incident Commander role

Check next month's ARES Communicator for the solution

June NIMS Knowledge Solution

1. Chris Smith is the Situation Unit Leader. No Planning Section Chief is assigned. Who does Chris Smith report to?
 - D. Incident Commander

BREAK - OVER



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!

HELP WANTED

Saturday, July 29th 8 AM

2016 Chaska River City Days 5K Run /
Info contact: jozu.jones@gmail.com

Saturday JULY 29th 6 AM-NOON

Urban Wildland Half Marathon
Info contact: Tom York K0ZZX
email: Thomas.york@hotmail.com

Saturday Aug 5th 07:00-NOON

Tour de Tonka Cycling Event
Event info: <https://www.minnetonkaschools.org/district/mcec/events/tour-de-tonka>

Saturday Aug 12th 7AM-11PM

Gaylord Eggstravaganza
5K run & Parade
Info Contact: Don Burgess, KC0QNA
email: kc0qna@yahoo.com
phone: 612-578-7561

BREAK - OVER

Mail Boxes and Doorsteps

Package Thefts Increase

Recently the Savage Police Dept reports there has been an increase in package theft from mailboxes and doorsteps. Packages left on the front steps can be targets for thieves. Be sure you are doing the right thing to protect yourself and your items!

These thieves could be targeting delivery trucks, and stealing items after they have been dropped off to unoccupied homes.

Protect Yourself

- Collect your incoming mail and packages everyday as soon as you can
- Track your packages!
- Require a signature for delivery
- Consider having the package delivered to another location if you cannot be home. For example - your work place
- Have a trusted neighbor grab the package or request that it be delivered to their house
- Better yet - have the package held for pickup at the store

Remember, if you hear or see something suspicious or unusual.... Report it! Call 911

Crappy Pole Antenna

VE3WMB Blog

When using a lightweight doublet antenna in the field you often need a simple means of attaching the centre of the antenna to a fiber-

glass mast (I use the Shakespeare 20 foot Wondepole Crappy Pole). Attaching antennas to the eyelet at the tip of a pole usually results in some part of the tip eventually breaking. The solution



above shows how to make a simple centre support using a fishing snap swivel and a crimp ring terminal. The bottom of the snap swivel is at the centre of a "Electricians Knot" used to tie the two halves of the wire doublet together. I can't take credit for coming up with this idea (it came from someone on QRP-L) but I have used it a lot and it works very well.

BREAK - OVER



ARES Breakfast

Saturday
August 12th 2017
7:30AM

Hy-Vee Market Grille,
6150 Egan Dr, Savage, MN

NECOS Schedule July 2017

The first Monday or the month the net is held on the WB0RMK repeater, Carver. You will find WB0RMK here: 147.165/765 PL 107.2

Date	NECOS_____
Jul 24th	KD0UWZ Chad
Jul 31st	N0BHC Bob
August 2017	
Aug 7th	WA0DGW John
Aug 14th	KD0UWZ Chad
Aug 21st	N0BHC Bob
Aug 28th	WA0DGW John