



# ARES COMMUNICATOR

Information for Scott County Amateurs



March, 2018

Accurate, Reliable Emergency Communications for our Community

Volume 18, Number 3

## SKYWAN Training Season

The National Weather Service office in Chanhassen updates the Weather Spotter presentation every three years. The NWS trains volunteer instructors with the new material. The instructors in turn provide training to about 1200 Radio Amateurs every two years.

The spotter training program runs from March to May every year. The Class

Schedule comes out every February on the Metro Skywarn website:

[www.metroskywarn.org](http://www.metroskywarn.org)

The NWS brings its weather knowledge and access to exciting and instructive video footage and slides and the local

Amateur Radio organizations bring their expertise in emergency communications. The result is a four hour video and slide presentation.

Net operations rely upon a high degree of independence from spotters. Spotters are trained about Basic Storm Structure and the sequence of events of an Approaching Severe Thunderstorm. The goal of this info is to educate the Spotter on how to place themselves safely near severe weather and how to report into the net.

Special emphasis is placed on training the spotter how to differentiate severe weather from weather easily confused with severe weather with a specially prepared video and slide presentation. Many useful Weather Terms are learned to facilitate communication on the net.

To qualify, radio amateurs must pass a multiple choice test every two years. Spotters are expected to monitor severe weather potential and activate themselves as needed and available and place themselves at useful locations.

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Reports are requested from anyone seeing severe weather. Updates from the NWS about current conditions are repeated or updated every ten minutes. Occasionally, the NWS will request information from a specific location or regarding specific conditions.

Check out the training dates below and make plans to update your skills. You can find more info about specific classes under the "Classes" tab at: [www.metroskywarn.org](http://www.metroskywarn.org)

### Sat 3-17 9AM -1 PM

Falcon Heights CERT  
Falcon Heights City Hall  
2077 West Larpenteur Avenue  
Falcon Heights, MN  
Walk ins welcome.  
Facility info contact: Kris Grangaard  
[ktbd4@comcast.net](mailto:ktbd4@comcast.net)

### Sat 3-17 9 AM -1 PM

Bloomington AUXCOMM  
Bloomington Fire Station #1  
10 West 95th St. Bloomington, MN  
Walk ins welcome.  
Facility info contact: Brian at  
[bmesmay@gmail.com](mailto:bmesmay@gmail.com)

**SpotterTraining** *cont'd on page 2*

## ARES Activities

**Weekly Net Monday 7 PM 146.535 mhz (s)**

**Breakfast Saturday, April 14th**

**Digital Monday, April 16th**

### 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

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

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Savage, MN. 55378

E-Mail: [N0BHCA@aol.com](mailto:N0BHCA@aol.com)

Phone: Home 952-894-5178 Portable 612-280-9328

# Spotter Training - cont'd from page 1

## Thurs 4-5 6 PM-10 PM

Richfield CERT and Richfield Amateur Radio Club  
Richfield Municipal Center  
Bartholomew Room  
6700 Portland Avenue  
Richfield, MN  
REGISTRATION REQUIRED.  
Facility info contact: Grant at  
grant@mnsafe.org

## Tues 4-10 6pm – 10pm

Maple Grove Radio Club  
Maple Grove Fire Station #2  
13450 Maple Knoll Way  
Maple Grove, MN  
Walk ins welcome. .  
Facility info contact: info@k0lrc.org

## Sat 4-14 9 AM –1 PM

SEMARC  
Zion Lutheran Church  
8500 Hillside Trail S  
Cottage Grove, MN  
Enter on the west side of the building.  
REGISTRATION REQUIRED.  
Facility info contact: Dave at 612-250-3417  
orfinster99@comcast.net

## Sat 4-21 9 AM –1 PM

Maplewood Fire Department  
Maplewood Fire Station 2  
1900 Clarence St.  
Maplewood, MN  
Walk ins welcome.  
Facility info contact: Chief Lukin at 651-775-7316

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## Scott County ARES Contacts

Emergency Coordinator  
Bob Reid N0BHC  
13600 Princeton Circle  
Savage, MN 55378  
952-894-5178  
N0BHC@arrl.net

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



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## Sat 4-28 9 AM -1 PM

Twin Cities Repeater Club  
Open Circle Church  
2400 Highland Dr  
Burnsville, MN  
Walk ins welcome.  
Facility info contact: Brett at n0bak@arrl.net

## Wed 5-2 6 PM - 10 PM

City of Roseville  
Roseville Fire Station  
2701 Lexington Ave N  
Roseville, MN  
REGISTRATION REQUIRED..  
Facility info contact: Emily.Nelson@cityofroseville.com

## Tues 5-8 6 PM – 10 PM

Hennepin County Emergency Management  
Hennepin County Public Works - EOC Room  
1600 Prairie Dr.  
Medina, MN  
Walk ins welcome.  
Facility info contact: Michael.Ostlund@hennepin.us

BREAK - OVER



## NBEMS Current Versions

The current version of the Fldigi manual is available at NBEMS Info page at [www.scottares.org](http://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/](http://www.w1hkj.com/) and [www.scottares.org/NBEMS.htm](http://www.scottares.org/NBEMS.htm)

Here are the most recent releases as of March 16, 2018.

Software	Version
Fldigi	4.0.16
Flwrap	1.3.4
Flmsg	4.0.5
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](mailto: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.arrrl.org/exam\\_sessions/search](http://www.arrrl.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!

### March 17, 2018 Saturday 8:45 AM

Sponsor: Bloomington Off/Emergency Mgmt  
Daniel J. Royer (952) 888-9756

Email: [dandroyer@gmail.com](mailto:dandroyer@gmail.com)

Location: City Hall-Police Department  
1800 W Old Shakopee Rd  
Bloomington MN 55431

### March 17, 2018 Saturday 9:00 AM

Sponsor: SEMARC  
Daniel M. Franz (651) 769-0358

Email: [wd0gup@hotmail.com](mailto:wd0gup@hotmail.com)

Location: Zion Lutheran Church  
8500 Hillside Trail South  
Cottage Grove MN 55016  
Walk-ins allowed, Pre-reg requested

### March 26, 2018 Monday 6:00 PM

Sponsor: SMARTS  
Dale A. Blomgren (952) 402-2155

Email: [kdzerob@aol.com](mailto:kdzerob@aol.com)

Location: Carver County Library  
7711 Kerber Blvd  
Chanhassen MN 55317  
Walk-ins allowed, Pre-reg requested

### April 7, 2018 Saturday 10:00 AM

St Paul Radio Club  
Leon H. Dill (651) 688-9964

Email: [w0coec@arrrl.net](mailto:w0coec@arrrl.net)

Location: Ramsey Co Library Maplewood  
3025 Southlawn Dr  
Saint Paul MN 55109-1577  
Walk-ins allowed, Pre-reg requested

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## 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 RMS voltage of a sine wave with a value of 17 volts peak?  
A. 8.5 volts  
B. 12 volts  
C. 24 volts  
D. 34 volts
2. Which of the following components should be added to an existing resistor to increase the resistance?  
A. A resistor in parallel  
B. A resistor in series  
C. A capacitor in series  
D. A capacitor in parallel
3. What is an advantage of using a ferrite core toroidal inductor?  
A. Large values of inductance may be obtained  
B. The magnetic properties of the core may be optimized for a specific range of frequencies  
C. Most of the magnetic field is contained in the core  
D. All of these choices are correct

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

## February General Pool Answers

1. What is the peak-to-peak voltage of a sine wave that has an RMS voltage of 120 volts?  
D. 339.4 volts
2. What will happen to the resistance if the temperature of a resistor is increased?  
C. It will change depending on the resistor's temperature coefficient
3. What is the total resistance of a 10 ohm, a 20 ohm, and a 50 ohm resistor in parallel?  
A. 5.9 ohms

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### April 11, 2018 Wednesday 7:00 PM

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

## Work the World on 40M

(\$59 USD)

When was the last time you used a radio you had built? The BITX40 board is a two board, 40 meter SSB transceiver module kit with digital control! Inside an evening, you can be on-air with this digital SSB transceiver, chatting with the local gang or chasing DX across the world. Plug in the earphones, the included electret mic, tuning and volume controls, and you are on air! Included are high quality connectors, all the needed sockets and jacks, tuning and volume controls, mounting hardware, etc.

The BITX40 is shipped as a set of two boards : The Raduino and the Main Transceiver Board, with connectors and external components. You have to supply your own cabinet, mic, speaker, power supply and Antenna. Soldering is required, but all of the SMD and other components on the Main Transceiver Board and already soldered in place for you. Your kit-building efforts are little more than connecting the off-board controls via the supplied wiring connectors.

The original BITX was published on the Internet in the year 2003. In the last 13 years, it has grown to become one of the most popular rigs among radio amateurs around the world. The BITX40 board is this very classic now available as a fully tested board that is easy to hookup, modify and operate. You can read the original article that

described the BITX at <[www.phonestack.com/farhan/](http://www.phonestack.com/farhan/)>.

What's special about this version of the BITX?

- Uses a 12 MHz IF and a Si5351 at 5 MHz as a rock solid local oscillator
- The entire transceiver fits into a single large and easily accessible PCB
- Though it works on 40 meters, it is easy to change coils and work it on other bands (details to be released soon)
- It has a separate power line for the PA. By increasing the PA power voltage, the transmit power can be increased
- The components supplied with the board will get you up on air without any special skill
- Read the Wire Up to understand how it is hooked up at<[www.hfsignals.com/index.php/2017/11/23/wiring-up-the-bitx40/](http://www.hfsignals.com/index.php/2017/11/23/wiring-up-the-bitx40/)>



Here is a look at what is included when you purchase the BITX40.

Why BITX? This inexpensive transceiver will allow you gain hands-on fun with your ham ticket. You will learn more by completing and using this radio than you could by intentional study of volumes of dry literature. Problems? There is a great non-judgmental group of hams that gently support first time builders as well as develop interesting hacks < <https://groups.io/g/bitx20> >. Follow the building process in the months to come and share the fun!

HF Signals is founded by Ashhar Farhan, VU2ESE as a part of Paradigm E-commerce Pvt. Ltd to encourage people all over the world to get more active in amateur radio, analog electronics and self-learning. Building and modifying radios is a great education. Lack of access to Elmers and radio builders' community, absence of test equipment all impede the spread of homebrewing. "With the BITX40, we hope to recover that ground and encourage more and more people to get on air, modify, experiment, build and learn."

Many thanks to Ashhar Farhan, VU2ESE, as a part of Paradigm E-commerce Pvt. Ltd for the service to the ham community by making this fun radio available for a great price, and giving a livelihood to those building the boards.

Check out the website at <<http://www.hfsignals.com/index.php/bitx40/>> and join the fun!

BREAK - OVER

## 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)



## Ecom Up Close & Personal

March 27<sup>th</sup>, 7PM

Help spread the word about an interesting and timely presentation at the March meeting of the South East Metro Amateur radio Club (SEMARC). The meeting will occur on Tuesday, March 27 at 7:00 PM at the Zion Lutheran Church in Cottage Grove Minnesota. Directions to the Church can be found at [www.semarc.org](http://www.semarc.org).

The program will be offered by Dr. Guillermo Narvaez, N0GUI, of the U of M and is entitled "Reflections on the Role Ham Radio Played in the Recovery of Puerto Rico in the Aftermath of Hurricane Maria".

Dr. Narvaez was one of the "Force of Fifty" deployed by the ARRL and the ARC to re-establish communications on the island. He will share his experience with the deployment, equipment and how we might best prepare for similar eventualities throughout the U.S. and internationally.

Members of the larger amateur community are invited to join SEMARC at this presentation. A good turnout by the amateur community will reflect well on the work, not only of the force of fifty but of the contribution by N0GUI himself.

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.

Which is the top priority within the ICS common leadership responsibilities?

- A. Establishing agency policies for future incidents
- B. Encouraging creativity and risk taking
- C. Enhancing partnerships with Agency Representatives
- D. Ensuring safe work practices

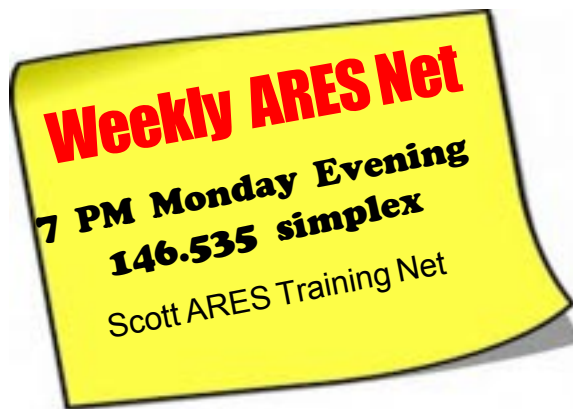
Check next month's ARES Communicator for the solution

## February NIMS Knowledge Solution

1. The Operational Period Briefing:

B. Presents the Incident Action Plan (IAP) for the upcoming period to supervisory personnel

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!



### ARES Breakfast

Saturday  
April 14th 2018  
7:30AM

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

## NECOS Schedule March 2017

The first Monday of the month the net is held on the WBORMK repeater, Carver. You will find WBORMK here: [147.165/765](http://147.165/765) PL 107.2

Date      NECOS\_\_\_\_\_

Mar 19th KD0UWZ Chad

Mar 26th N0BHC Bob

April 2018

Apr 2nd WA0DGW John - First Mon. Net

Apr 9th KD0UWZ Chad

Apr 16rd N0BHC Bob

Apr 23th WA0DGW John

Apr 30th WA0DGW Chad