



ARES COMMUNICATOR

Information for Scott County Amateurs



April, 2017

Accurate, Reliable Emergency Communications for our Community

Volume 17, Number 4

Spotter Appreciation Picnic

Saturday May 20th

The Metro Skywarn Spotter Appreciation Picnic will be on Saturday, May 20th from 1pm to 3pm at the NWS office in Chanhassen.

The National Weather Service is located at: 1733 Lake Drive West, Chanhassen, MN 55317.

IF Mother Nature would rain on the Skywarn Spotter Appreciation Picnic, the rain day is: Sunday, May 21st.

Hot dogs and drinks will be provided. Please consider a side dish to bring. Register for door prizes when you arrive. You must be present at the 2:30 drawing to win.

Free and family-friendly with games for the kids.

Sign-up link: <https://www.eventbrite.com/e/metro-skywarn-spotter-appreciation-picnic-tickets-33353466115>



Metro Skywarn Spotter Frequencies
 146.700- PL 127.3 [WC0HC] N Metro
 147.210+ PL 100.0 [W0BU] S Metro
 147.000+ [K0LTC] West Metro
 442.600+ PL 156.7 Chatter Only



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

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Summits-on-the-Air

Enjoy some radio fun!



Summits on the Air (SOTA) is a fun and challenging activity for radio amateurs and shortwave listeners that encourages portable operation in mountainous areas. SOTA has been carefully designed to make participation possible for everyone – you don't have to be a mountaineer! There are awards for activators (those who hike to the summits) and chasers (those who operate from home, a local hilltop, or another summit). There are no fees and you can participate on your own schedule. The rules of the SOTA radio-sport make it interesting and accessible to all.

A *chaser* is a ham radio operator or a short wave listener (SWL) who tries to find an *activator* transmitting from a summit. The ham chaser earns points by making contact with the activator; the SWL chaser earns points by hearing and logging contacts made with the activator. Chasing can be done anywhere, from the comfort of your shack or from any other location, portable or mobile. If a contact is made and the minimum required information is exchanged, *chasers* earn points. *Chasers* have an important role in the SOTA program because an

Summits-on-the-Air *cont'd on page 2*

ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)
 Breakfast Saturday, May 13th
 Digital Monday, May 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

Summits-on-the-Air - cont'd from page 1

activator needs at least four (4) valid contacts in order to earn activation points for a given summit. Would you like to get more information? Check out the link for Zero-land activity <http://www.w0c-sota.org/about-sota/> The North America activity map is found here: <http://na-sota.org/>

SOTA is now fully operational in many countries across the world. A country or in North America, Provinces or States, may become an Association with qualifying SOTA summits. Each summit is assigned a point value according to its elevation. Certificates are awarded for various scores, leading to the prestigious "Mountain Goat" and "Shack Sloth" trophies. An Honor Roll for Activators and Chasers is maintained at the self-serve SOTA online database.

The Summits on the Air amateur radio award program was the idea of John Linford, G3WGV. Although he had the idea many years ago, it was not until he ran across the European Adventure Radio website run by Richard G3CWI, that he put the idea down on paper. He emailed it to Richard with the a single question "should we try to get this going?". The original idea ran to a few paragraphs on a single side of paper but it took well over 1,000 man-hours of work to turn that idea into a viable award program.

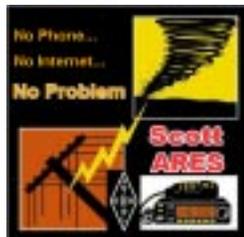
Much of the award was discussed and dissected on the internet before it was launched on 2 March 2002. England and Wales launched first, soon to be followed by Scotland. A key objective was making the award internet-based, for this an online database was needed. Simply having an award and a support infrastructure does not ensure success however, and a huge effort was put in to publicize the award. Both John and Richard wrote articles, gave numerous talks to radio clubs, at rallies and exhibitions and ran SOTA stands at various events. Over 1,000 leaflets were given out in the first 18 months of the

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Scott County ARES Contacts

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scheme. But even that was not enough. International publicity was gained by constant news releases to overseas organizations



Enjoying the scenery is only part of the SOTA activation experience enjoyed by Chris, W6HFP.

and finally, a keen band of activators made it their business to explain SOTA to everyone they contacted on the air.

Today, SOTA has hundreds of participants in Associations across the World, all sharing the same award ethos and infrastructure.

Note that SOTA is an award program not a club or society; as such you can't be a "Member" of SOTA but you can certainly be a participant!

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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)



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!

May 6, 2017 Saturday 10:00 AM

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

Email: w0cof@arrl.net

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

May 10, 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

May 20, 2017 Saturday 7:00 PM

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

May 27, 2017 Saturday 9:00 AM

Sponsor: Bloomington Off/Emergency Mgmt

Daniel J. Royer (952) 888-9756

Location: Perkins Restaurant & Bakery
City Hall-Police Department
1800 W Old Shakopee Rd
<http://www.Bloomington-VE.org>
Bloomington MN 55431

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 the most likely to cause interfering signals to be heard in the receiver of an HF mobile installation in a recent model vehicle?
A. The battery charging system
B. The anti-lock braking system
C. The anti-theft circuitry
D. The vehicle control computer
2. Which of the following causes opposition to the flow of alternating current in an inductor?
A. Conductance
B. Reluctance
C. Admittance
D. Reactance
3. What happens when the impedance of an electrical load is equal to the internal impedance of the power source?
A. The source delivers minimum power to the load
B. The electrical load is shorted
C. No current can flow through the circuit
D. The source can deliver maximum power to the load
(Check next month's issue of the ARES Communicator for the answer.)

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*"True humility is not thinking less of yourself;
it is thinking of yourself less."*
Jim Stovall

March General Pool Answers

1. What is one disadvantage of using a shortened mobile antenna as opposed to a full size antenna?
C. Operating bandwidth may be very limited
2. What is reactance?
B. Opposition to the flow of alternating current caused by capacitance or inductance
3. How does an inductor react to AC?
D. As the frequency of the applied AC increases, the reactance increases

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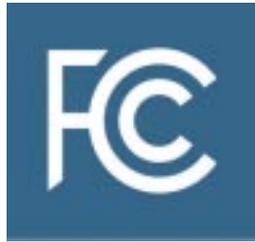
Police Radio Jammer Fined

\$400K!

ARRL Letter

The FCC has proposed a fine of more than \$400,000 on a Queens, New York, man who has admitted making unauthorized transmissions on New York City Police Department (NYPD) radio frequencies, maliciously interfering with NYPD officers' communications. Jay Peralta, 20, is alleged to have transmitted false bomb threats, false claims of criminal activities involving firearms, false distress calls from purported NYPD officers, and threats against individual NYPD officers. The unauthorized transmissions began a year ago, according to the FCC.

"Through his actions, as he described them to the NYPD, Mr. Peralta has demonstrated not only a deliberate disregard of the Commission's authority and rules, but of the safety of NYPD officers and the public that they are called to serve and protect," the FCC said in a *Notice of Apparent Liability*, issued on April 14. "Commission action in this context is therefore essential to safeguard authorized operations on spectrum licensed for public safety uses, and, accordingly, a substantial penalty appears warranted."



The FCC said the *NAL* addresses nine unauthorized and interfering transmissions that Peralta has admitted to the NYPD that he made on its radio system. The FCC said Peralta's unauthorized transmissions included false bomb threats, false claims of criminal activities involving firearms, false distress calls from purported NYPD officers, and threats against individual NYPD officers.

FCC Chairman Ajit Pai, said that with the *NAL*, the FCC is making it "abundantly clear that it will not tolerate unauthorized and illegal use of the radio spectrum." The entire Commission now must sign off on such proposed fines, and Pai said he was grateful to his fellow FCC members for "agreeing to act swiftly and strongly" in the matter. "This may not be a typical pirate radio case in which an unauthorized operator inflicts damage on a radio broadcaster that is operating with a valid FCC license," Pai said, "but it does involve unauthorized interference to critical public safety communications systems."

Peralta was arrested last fall along with two other men suspected of committing several robberies. According to news accounts, police found a cache of scanners and radios in one of the suspects' homes.

The FCC said it was alerted by a Twitter post about an unlawful intrusion on the NYPD radio system and dispatched

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an Enforcement Bureau agent to check it out. On September 30, the NYPD contacted the FCC's New York Office and advised that it had arrested Peralta and another individual in connection with unauthorized transmissions on NYPD's radio system. According to police reports, the other individual arrested — Ricardo Torres, 29, described as "a ham radio enthusiast" in some news accounts — allegedly provided the radios used.

Torres, is said to hold an FCC General Mobile Radio Service (GMRS) license but his name does not appear in the Amateur Radio licensee database. Police said they found 15 portable radios, 9 scanners, roof-top antennas, an amplifier, and assorted other electronics in Torres's apartment.

Peralta has 30 days to pay or contest the proposed \$404,166 FCC forfeiture.

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"The most expensive component in the circuit will always sacrifice itself in order to protect the fuse."

A. Nony Moose



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

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

Software	Version
Fldigi	4.0.2
Flwrap	1.3.4
Flmsg	4.0.2
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.



Surf's Up!

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

High on Solder

<http://www.highonsolder.com/ham-radio/8040-meter-loaded-dipole-antenna>

The Bolger's plan for this antenna was to build a lightweight 80/40 meter antenna for field use that wouldn't overload his 21 foot telescoping fiberglass mast. The antenna also needed to be capable of handling 50 watts at 100% duty cycle for digital operation as well as 100 watts of SSB.

Powerpole Polarity Tester

<https://www.youtube.com/watch?v=BnIsiaZ0O1A>

K7AGE how to build a simple red/green LED Powerpole polarity tester. Along with a bit of Ohm's law.

Soldering Iron Maintenance?

<https://www.youtube.com/watch?v=7PWmMxjXwYE>

Ever had a soldering iron that just didn't seem to solder correctly? Spend the ten minutes with "1929fordhotrod" and happy soldering.

Resistor Sorting

<https://www.baldengineer.com/sorting-resistors.html>

The method for sorting resistors is pretty simple. First, sort them by 4-band and 5-band types. Next look at their multiplier code. Then, sort them by the first band's color. Store them in bins or packets based on these two pieces of data.

Eamon Skelton's EI9GQ Homebrew Radio Page

<http://homepage.tinet.ie/~ei9gq/>

Eamon Skelton, EI9GQ, has a very impressive collection of homebrew equipment, Homebrew page, along with a collection of pictures of other home-brewer's creations, Images page. The links page will take you to places you didn't know you need. All in all a great place to visit and explore the state of home-brew gear.

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March NIMS Knowledge Solution

1. Who generally facilitates the Operational Period Briefing?
B. Operations Section Chief

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.

Select the TRUE statement:

- A. ICS organizational structure should include only the functions and positions needed to achieve the incident objectives
- B. ICS positions may be combined in order to save on staffing or achieve a higher level of efficiency
- C. ICS encourages the use of unique position titles in order to better meet the specific incident needs
- D. ICS recognizes that an Incident Commander may not be necessary if an Operations Section Chief is assigned

Check next month's ARES Communicator for the solution

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UHF HT \$17.00!

Interesting Handi Talkie

You can read a more complete review of this inexpensive, little 440 MHz, 2 watt handie here: http://www.miklor.com/COM/Review_T18.php Here are the bullet points for the curious. Search on the model number and you can find 'For Sale' offers on the usual sites.

The RADTEL T18 rechargeable radios are well designed for your indoor use like Hotel, Restaurant, kids & outdoor use like excursions, travel, Climbing, adventures. Take a pair of radios on your camping, hiking or to your house backyard or nearby park.

Single band UHF 400-470mhz with output power 2-3w, 16 Channels. Very loud and Clear voice and perfect for your communication need.

You can use programming cable to program the radio to some other frequencies you wanted for PMR, FRS or GMRS, the cable is K-Connector and is compatible with Baofeng BF-888S programming cable. With a simple push-to-talk button, you can enjoy outdoor activities and always keep connected to your traveling groups, friends and family.

The radio with English voice annunciation function.



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Midway and Kure Islands Deleted DXCC Entities

ARRL Letter

Midway and Kure Islands have been placed on the list of DXCC deleted entities, effective August 26, 2016. This came about as an unintended consequence of action last summer by then-President Barack Obama that expanded the Papahānaumokuākea Marine National Monument to include the northwestern Hawaiian Islands west of Ni'ihau Island, making it the largest contiguous protected conservation area under the US flag.

Midway (KH4) had qualified for DXCC status by virtue of its being governed by a separate administration. Because it is now under the administration of Papahānaumokuākea Marine National Monument, however, it becomes a deleted entity.

Approximately 50 people live on Midway, including US Fish and Wildlife Service staffers and contractors. The Battle of Midway, a turning point in the Allied World War II Pacific Campaign, took place in June 1942.

Now uninhabited, Kure Island (KH7K), a part of Hawaii, is separated from the rest of the state by Midway; because of that, it qualified for DXCC status under Section II, 2 (b) (iii) of the DXCC Rules — separation from its “parent” Hawaii. Midway Island’s change in DXCC status in turn made Kure Island no longer eligible for DXCC status, since Kure no longer is separated from the rest of Hawaii by intervening land or islands that are part of another DXCC entity.

Kure Island once was home to a US Coast Guard LORAN station, remnants of which are still evident. It has been a state wildlife sanctuary since 1981.

The relevant parts of Section II of the DXCC Rules follow: A Geographic Separation Entity may result when a single Political Entity is physically separated into two or more parts. The part of such a Political Entity that contains the capital city is considered the Parent for tests under these criteria. One or more of the remaining parts resulting from the separation may then

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qualify for separate status as a DXCC Entity if they satisfy paragraph a) or b) of the Geographic Separation Criteria, as follows.

b) Island Areas (Separation by Water):

A new entity results in the case of an island under any of the following conditions:

iii) The island is separated from its Parent by intervening land or islands that are part of another DXCC entity, such that a line drawn along a great circle in any direction, from any part of the island, does not touch the Parent before touching the intervening DXCC entity. There is no minimum separation distance for the first island entity created under this rule. Additional island entities may be created under this rule, provided that they are similarly separated from the Parent by a different DXCC entity and separated from any other islands associated with the Parent by at least 800 km.

Neither Midway nor Kure was able to be activated without prior permission and only for a planned DXpedition. Only contacts made on August 25, 2016, or earlier will count for these two entities.

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Weekly ARES Net

Scott ARES Training Net

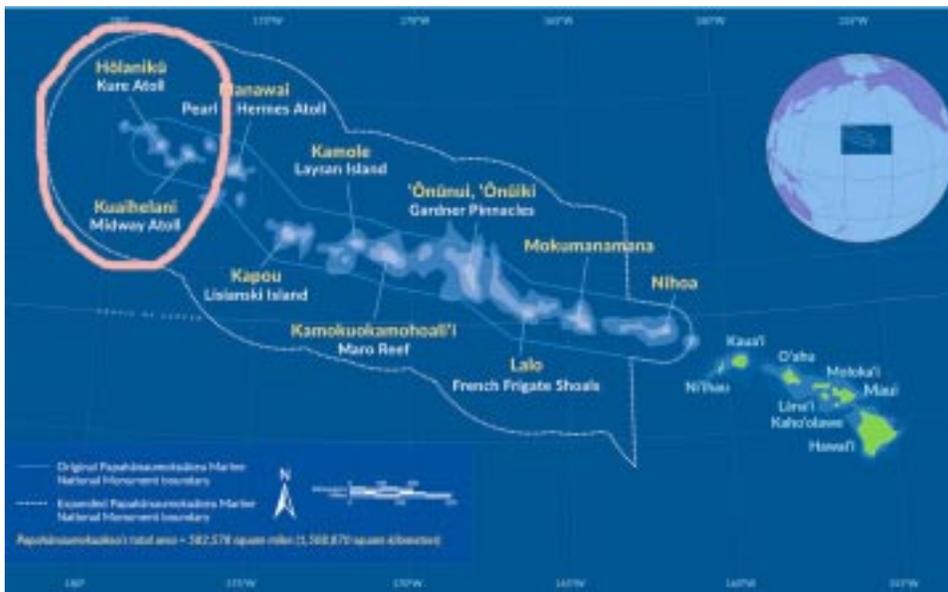
The Scott ARES net meets every Monday evening at 7:00 PM either on 146.535 simplex or on the first Monday of the month the WBORMK repeater 147.165 (PL 107.2).

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!

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ISS Packet on VHF

ARRL Letter

The Amateur Radio on the International Space Station packet digipeater system is again operating on VHF — 145.825 MHz. The failure of an Ericsson handheld VHF transceiver on board the ISS last fall had caused ARISS to shift packet operation to 70 centimeters. In February, a cargo resupply mission delivered a new Ericsson 2-meter handheld to replace the one that had failed, which had been used in the Columbus module for school group contacts and for Amateur Radio packet.



While the VHF transceiver was offline, ARISS shifted school contacts from NA1SS to the Kenwood TM-D710 transceiver in the Russian Service Module. NASA ISS Ham Project Coordinator

Kenneth Ransom,

N5VHO, said the VHF capability now back in Columbus can be used in conjunction with passes involving the HamTV digital amateur television (DATV) system, which operates on 2.4 GHz.

ARISS International Chair Frank Bauer, KA3HDO, said recently that ARISS continues to make progress on the development of the new interoperable radio system on the ISS “that we hope to use to replace our aging radio infrastructure in the Columbus module and the Service module.”

Packets digipeated in a valid APRS format via the ISS system and picked up by an internet gateway station are documented on the Amateur Radio Stations heard via ISS page here: <http://www.ariss.net/> according to Kenneth Ransom, N5VHO, ISS Ham Project Coordinator

BREAK - OVER

National Prime Rib Day

April 27

For just a day, forget about the diet. There's only one way to celebrate Prime Rib Day. And, that is with a big, thick, juicy cut of prime rib, cooked perfectly to your liking. Don't forget the au jus and the fully loaded baked potato.



The Man and the Penguin

I saw this man the other day with a penguin, he was looking sad. I asked him what he was doing with a penguin and he said that he had found it. I told him to take it to the Zoo. And with that he left.



I saw him again this morning he was still with the penguin, this time with a smile on his face. I asked him about the penguin and if he had taken it to the Zoo.

He said, “Yes I did that yesterday, today we are going to the theater.”



ARES Breakfast

Saturday
May 13th 2017
7:30AM

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



NECOS Schedule May 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

- May 2017
- May 1st KD0UWZ Chad
- May 8th N0BHC Bob
- May 15th WA0DGW John
- May 22th KD0UWZ Chad
- May 29th N0BHC Bob
- June 2017
- Jun 5th WA0DGW John