



# ARES COMMUNICATOR

## Information for Scott County Amateurs



February, 2016

Accurate, Reliable Emergency Communications for our Community

Volume 16, Number 2

## Severe Storms Conference

April 9th



April 9, 2016  
University of St. Thomas

The 2016 MN Severe Storms Conference is scheduled for April 9th. Registration will open at Noon on Wednesday, February 17th. The keynote speaker will be Mayor Bob Dixon, mayor of Greensburg, Kansas. The town of Greensburg was devastated by an EF-5 tornado 9 years ago and mayor Dixon will tell us about how the town has recovered and challenges they've experienced along the way.

Join storm spotters and weather enthusiasts from across the state and region for the 11th annual Minnesota Severe Storms Conference. It will be a full-day severe weather conference designed to train you in spotting techniques, equip you with information about the latest in weather technology, and connect you with other Spotter communities from across the state.

The objective for this conference is to train, equip, and connect severe storm spotters and weather enthusiasts:  
TRAIN... spotters to improve observational skills, reporting accuracy, and personal safety.

cont'd col. 2

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

EQUIP... with information about latest tools & technologies that can serve you in your duties.

CONNECT... Severe Storms enthusiast communities from across the state to build relationships, encourage participation, and attract newcomers.

The conference is geared for experienced storm spotters and weather enthusiasts, but is open to all. If you are interested in further developing your storm spotting skills and meteorological knowledge, this workshop is the perfect place for you.

If you are a public safety official and would like to hear more about the latest weather technologies that can make your community safer, please join us. If you simply have a fascination for weather and want to learn more about it, you are welcome to attend. The Minnesota Severe Storms Conference is intended to give intermediate to advanced skills in the areas of storm identification, severe storms research, spotter operations, storm safety, and the latest technology involving

severe weather. If you are new to the spotter community, please be sure to also attend a spotter certification class near you!

Visit the MN Severe Storms Conference website for more info: <http://www.mnssc.org/>

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## ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, March 12th

Digital Monday, March 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

## King of Congress Asks for FCC Muscle

### Congressman Intercedes with FCC Chairman on Amateur Radio Interference Concerns

ARRL Letter

New York Congressman Peter King has asked FCC Chairman Tom Wheeler to put some Enforcement Bureau heat on those interfering with various radio communication services, including Amateur Radio, in the New York City Metropolitan Area. While visiting Capitol Hill to promote the Amateur Radio Parity Act, ARRL Hudson Division Director Mike Lisenco, N2YBB, and General Counsel Chris Imlay, W3KD, recently met with King, a Republican representing New York's 2nd District, to discuss the interference issue. King is among the original of the 118 cosponsors of the Amateur Radio Parity Act (H.R. 1301) in the US House.

"Rep King, a long-time supporter of Amateur Radio who is also very concerned about the malicious interference of licensed services, offered to send a letter to FCC Chairman Tom Wheeler on our behalf," Lisenco said. "Like many areas of the country, the Hudson Division has been plagued with malicious interference on our VHF and UHF repeaters for years. There has been no relief from the FCC, despite repeated pleas for remedy made by ARRL. All requests for help have consistently fallen on deaf ears."

In his January 15 letter to Wheeler, King pointed out that while multiple perpetrators have been involved, the identity of the "ringleader" is well known to the Enforcement Bureau. He reiter-

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ated that the malicious interference had "been allowed to continue for too long," and he called for "timely and visible enforcement" to deter others.

"The Amateur Radio repeaters on Long Island that are rendered useless by this individual are used for emergency preparedness exercises and were used extensively in Hurricane Sandy disaster relief efforts," King told Wheeler. "This individual has been allowed to proceed without any apparent Commission enforcement for well over 2 years, despite repeated complaints from ARRL, NBC engineering staff, and at least two Long Island Amateur Radio clubs. NBC remote pickup units and public safety radio systems also have been troubled by malicious interference. In earlier correspondence with the FCC, King noted, he had expressed concerns regarding interference caused by "pirate radio operators" who impact public safety.

King said he realizes that FCC Enforcement Bureau resources are limited and that he appreciates the attention the Commission has paid to such issues as pirate radio investigations, but he asked for a tougher stance.

"[D]eliberate interference with public safety, broadcast program production, and Amateur Radio public service communications, such as what is exhibited in this case, must be swiftly and visibly addressed," King concluded.

Lisenco said King's willingness to cooperate in addressing the interference problem is "an indication that our legislative efforts are building a brand with legislators" that goes beyond any specific bill, such as the Amateur Radio Parity Act. "It underscores the importance of maintaining a presence in Washington through both our consultants and our own efforts," he said, "and it offers us avenues of redress that, until now, we were unable to access."

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### Scott County ARES Contacts

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



*An extra day to complete your TAXES!*

## 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!

### February 22, 2016 Monday 6:00 PM

SMARTS

Dale A. Blomgren (952) 402-2155

Email: [kd0b@arrrl.net](mailto:kd0b@arrrl.net)

Location: Carver County Library

7711 Kerber Blvd

Chanhassen MN 55317

Walk-ins allowed, Pre-reg requested

### February 27, 2016 Saturday 9:00 AM

Sponsor: Bloomington Off/Emergency  
Mgmt

Daniel J. Royer (952) 888-9756

Email: [dan-arrrl@droyer.org](mailto:dan-arrrl@droyer.org)

Location: City Hall-Police Department

1800 W Old Shakopee Rd

Bloomington MN 55431

Walk-ins allowed, Pre-reg requested

### March 5, 2016 Saturday 10:00 AM

Sponsor: 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 55109-157

Walk-ins allowed, Pre-reg requested

### March 9, 2016 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

## 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 maximum symbol rate permitted for RTTY or data emission transmissions on the 10 meter band?  
A. 56 kilobaud  
B. 19.6 kilobaud  
C. 1200 baud  
D. 300 baud
2. Which of the following is sufficient for you to be an administering VE for a Technician Class operator license examination?  
A. Notification to the FCC that you want to give an examination  
B. Receipt of a CSCE for General Class  
C. Possession of a properly obtained telegraphy license  
D. An FCC General Class or higher license and VEC accreditation
3. Which mode is most commonly used for voice communications on the 17 and 12 meter bands?  
A. Upper sideband  
B. Lower sideband  
C. Vestigial sideband  
D. Double sideband

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

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*"Procrastination is like a credit card:  
it's a lot of fun until you get the bill."*

Christopher Parker

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## January General Pool Answers

1. Which of the following is an advantage of an oscilloscope versus a digital voltmeter?  
D. Complex waveforms can be measured
2. Why is high input impedance desirable for a voltmeter?  
D. It decreases the loading on circuits being measured
3. What type of transmitter performance does a two-tone test analyze?  
A. Linearity

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## Skywarn Spotter Training

Metro Skywarn has announced the spotter training class schedule for 2016. There are a total of 17 classes scheduled for this year.

The complete list of classes can be found here:  
<https://metroskywarn.org/class-schedule>

Pre-registration is recommended, but not required. The reason pre-registration for all classes is requested is to aid the hosts and trainers in preparing for the class and to send out a survey at the end!

Attending the entire class is required. If you can only make it to a portion of the class, please attend another class. Remember, if you didn't attend class last year, you will need to this year!

Listed below are classes in the south metro area.

### March 5th 9:30AM – 1:30PM

Twin Cities FM Club  
Ridgedale Public Library - RHR Room  
12601 Ridgedale Dr Minnetonka, MN  
Walk-ins welcome. Pre-registration requested.  
Facility info contact: Earl Jarosh  
[earl@jarosh.org](mailto:earl@jarosh.org) 763-545-3275

### March 16th 6 PM – 10 PM

Carver County Gov Center  
600 East 4th Street  
Chaska, MN  
Walk-ins welcome. Pre-registration requested..  
Facility info contact: Mark Jones  
[jozu.jones@gmail.com](mailto:jozu.jones@gmail.com)

### March 19th 9 AM – 1 PM

Bloomington Emergency Communications  
Bloomington Fire Station #1  
10 West 95th St.  
Bloomington, MN  
Walk-ins welcome. Pre-registration requested.  
Facility info contact: Andrew  
[KC0RKH@arrl.net](mailto:KC0RKH@arrl.net)

### April 2nd 9 AM - 1 PM

Twin Cities Repeater Club  
Open Circle Church  
2400 Highland Dr  
Burnsville, MN  
Walk-ins welcome. Pre-registration requested.  
Facility info contact: Brett Knudson  
[n0bak@arrl.net](mailto:n0bak@arrl.net) cell 651-271-1843



### April 7th 6 PM-10 PM

Richfield CERT and Richfield Amateur Radio Club  
Richfield Municipal Center  
Bartholomew Room  
6700 Portland Avenue  
Richfield, MN  
Walk-ins welcome. Pre-registration requested.  
Facility info contact: Charlie  
[cobrien@cityofrichfield.org](mailto:cobrien@cityofrichfield.org).

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## Not the Brightest Bulb!

### Man sentenced in SECOND electricity theft conviction

A Spicer, Minn., man has been convicted of bypassing his electricity meter to steal more than \$10,000 worth of electricity during the course of four years. Terry Dean Johnson, 67, pleaded guilty last month to a felony for the theft of services and was sentenced Wednesday in Kandiyohi County District Court to five years of supervised probation. As part of his sentencing, he will have to pay restitution, plus a \$1,000 fine, and write a letter of apology to the Kandiyohi Power Cooperative.



The Kandiyohi County Sheriff's Office was first alerted to the situation in June 2013. According to court documents, the Kandiyohi Power Cooperative provided detectives with reports showing that Johnson had been receiving zero usage reports, and therefore no billing, for electrical usage in his residence.

Zero usage reports mean more than just not turning on the lights. It's the equivalent of pulling the electrical breaker in a home, common behavior for winterized cabins or summer homes. But law enforcement suspected Johnson was occupying the home because they had responded to disputes at the home during that time period. According to court documents, employment records also showed a resident of the home was working in Willmar during that time period. Court records show Johnson was previously convicted of electricity theft in Redwood County in April 2014.

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# Test Your NIMS Knowledge

This month we will begin our review of ICS-800: National Response Framework. The purpose of the National Response Framework is to ensure that all response partners across the Nation understand domestic incident response roles, responsibilities, and relationships in order to respond more effectively to any type of incident. The Framework focuses on response and short-term recovery instead of all of the phases of incident management.

Check your recall of the course material with this question.

As a member of the Unified Coordination Group, the Principal Federal Official (PFO):

- A. Promotes collaboration and works to resolve any Federal interagency conflict that may arise.
- B. Directs the incident command structure established at the incident.
- C. Has responsibility for administering Stafford Act authorities.
- D. Has directive authority over the senior Federal officials who are responding to the incident.

Check next month's ARES Communicator for the solution

# January NIMS Knowledge Solution

Incident managers begin planning for the demobilization process when:

- C. They begin the resource mobilization process.

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# 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/download.html](http://www.w1hkj.com/download.html) and <http://www.scottares.org/NBEMS.htm>

Here are the most recent releases as of February 15, 2016.

Software	Version
Fldigi	3.23.07
Flwrap	1.3.4
Flmsg	2.0.15
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.

# Hacker Charged with Terrorism

### Hacker who outed feds' info charged with terrorism

By: c4ismet.com

A Kosovar hacker who allegedly released personal information on some 1,300 federal and military employees to the Islamic State group has been extradited to the U.S. to be tried on terrorism charges. Ardit Ferizi, 20, was living in Malaysia in October when local police took him into custody for allegedly providing material support to a terrorist organization — ISIS — last year.

According to the indictment, Ferizi hacked into an online retailer's database in June and stole records on more than 100,000 customers. From those records, he was able to cull personally identifiable information on 1,351 federal employees and active military personnel. Ferizi provided this information to members of ISIS in August, who then posted the information online with a call for members to take action against those people, including perpetrating fraud using their personal information, as well as physical attacks.



A 30-page document posted online in August was accompanied by

the following message:

"We have your names and addresses. We are in your emails and social media accounts, we are extracting confidential data and passing on your personal information to the soldiers of the khilafah, who soon with the permission of Allah will strike at your necks in your own lands."

Federal investigators were able to follow a digital trail linking Ferizi with known terrorist Tariq Hamayun and two Arizona men who attempted an attack on attendees at the "Draw Mohammad Contest" held in Garland, Texas last year. Investigators leveraged this into an indictment, leading Malaysian officials to arrest Ferizi and extradite him to the U.S.

Ferizi appeared before a U.S. judge for the first time on Jan. 27, charged with computer hacking, identity theft and providing material support to a terrorist organization. If convicted, he faces up to 35 years in prison.

"As alleged, Ardit Ferizi is a terrorist hacker who provided material support to [ISIS] by stealing the personally identifiable information of U.S. service members and federal employees and providing it to [ISIS] for use against those employees," Assistant Attorney General John Carlin said after the arrest in October. "This case is a first of its kind and, with these charges, we seek to hold Ferizi accountable for his theft of this information and his role in [ISIS]'s targeting of U.S. government employees."

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## 2016 Worked All NCDXA "RST" Stations

A Special Event Covering All of Northern North America!

Members of the North Country DX Association (NCDXA) will be active in February and March 2016 from several different locations in Alaska, Yukon, Northwest Territories and Nunavut using KL7RST, VY1RST, VE8RST and VY0RST to further promote Amateur Radio up north.

This is a first for the north- a joint-venture KL7, VY1, VE8 and VY0 special event! All modes 6-160 meters and WARC bands are permissible. SWLs are welcome to participate. The object is to work or log (SWL) as many NCDXA "RST" stations as you can from their different locations.

Work/log each "RST" station only once per their QTH/band and mode. No cross band, cross mode or remote operating allowed. For wildcards, Portable "RST" Stations will also participate and are worth 3 points each/mode and band but must be the "RST" stations mentioned above! The portable stations must be outside their own prefix to count (ie- KL7RST/KL7 does not count but KL7RST/VY1, VY1RST/KL7, VE8RST/VY0 etc. count- note portable Canadian calls are in accordance with IC Rules and Regs.).

Watch the DX spots as we plan to have stations on from Whitehorse, Yellowknife, Anchorage, Fairbanks, Rankin Inlet, a Canadian research station near the North Pole on Ellesmere Island, a diamond mine in NWT, an Alaskan bush school and many other cities (maybe an Alaskan glacier or two!).

QSL manager is K7ICE. KL7YK is LotW administrator for Alaska, VY0CF for Nunavut, VY1MB for Yukon and VE8MN for the Northwest Territories. "RST" stations please send your logs in adi format to your LotW administrator and K7ICE. Optional full color certificates are also available (email JohnKL7JR@gmail.com for details) for working/hearing any of the "RST" stations.

SPECIAL EVENT DATE: February 15 (0001Z) through March 27 (2359Z), 2016 EXCHANGE: NCDXA "RST" stations send signal report and QTH (ie- 5x7 Anchorage, 5x9 Whitehorse etc.). Receiving stations send signal report and state, province or country.

CERTIFICATE LEVELS: Beautiful full color certificates are available for working/logging

- (1) One or two NCDXA "RST" station (s),
- (2) any KL7RST, VY1RST, VY0RST or VE8RST, but must work one of each
- (3) for those more competitive (keep in mind the scoring is for certificate levels and this is not a contest), a highest score category. Certificates are different scenery shots from the north for each level.

Scoring example: K7QRM works KL7RST in Anchorage on 10m SSB, 10m CW, 15m SSB and 40m CW for his Anchorage total of 4 points. K7QRM works KL7RST at Matanuska Glacier

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on 10m SSB and 12m SSB for his Matanuska Glacier total of 2 points. K7QRM also works VY1RST in Whitehorse on 10 SSB, 15m digital, 40m CW and 30m CW for Whitehorse total of 4 points.

K7QRM also works VE8RST in Yellowknife on 10m SSB and 20m SSB for Yellowknife total of 2 points. K7QRM also works VE8RST in Hay River on 10m SSB for 1 point total for Hay River. K7QRM's grand total points are the city QSO sum of 13 points (plus any wildcard points).

Handwritten or pc generated certificate applications are acceptable. First, 2nd, 3rd etc. places will be awarded. All certificates will be emailed in pdf format. Certificate deadline is May 15, 2016. As a bonus, pending snow depth and weather, we may also have KL7RST and VY1RST on together from the border of Alaska and the Yukon on the Alaska Highway. That has got to be another first for the north! A special QSL and certificate will be available for the border op.

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### Deep Thoughts



# Saltwater Antennas

Mitsubishi Electronics

When someone mentions a radio antenna, it tends to conjure up a vision of something made of steel and wire. But what about one made of water?

The Mitsubishi Electric Corporation has unveiled its SeaAerial, which uses a column of seawater sprayed into the air to create a radio transceiver antenna. Designed for use at sea or along shorelines, it's billed as the world's first seawater antenna capable of receiving digital terrestrial broadcasts.

In our day to day lives, we're used to dealing with radio frequencies that are so short and relatively strong that the transceiver antennae on our devices are correspondingly tiny. However, as radio frequencies get longer and the signals become weaker, the antenna has to be longer as well.

This fact of life means that many radio installations require very large antennae that are expensive, time consuming to build, and far from portable. On the other hand, if an antenna could be made out of water, you could have an antenna the size of Geneva's Jet d'Eau in the time it takes to fire up the pump. When it came time to move the installation, it would simply a matter of switching off the water and moving the electronics to another location.

But why seawater and not garden variety fresh water? Contrary to popular belief, pure water is a very poor conductor of electricity. It's the mineral ions dissolved in it that actually carry current, so for practical purposes, seawater works best for making a watery antenna.

The point about the SeaAerial isn't that it's aquatic. This isn't the first seawater antenna –

the US Navy has taken a keen interest in the idea in recent years, but so far it's been limited by the necessity of keeping the plume-spraying apparatus out of the water to prevent the circuit from grounding in the sea and killing the signal. Mitsubishi's innovation is an insulated nozzle that transmits the radio signal to the saltwater plume. According to the company, inside the nozzle is a quarter-wavelength tube of insulated material that physically separates the plume from the surrounding water and maintains the circuit.

Another factor in the SeaAerial design is that, though saltwater can conduct electricity, it is much less conductive than metals, which translates into poor efficiency as an antenna material.

Mitsubishi claims that by running computer simulations it was able to determine the ideal plume diameter – allowing for a 70 percent increase in efficiency.



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# Metro Skywarn Board Openings

The March Metro Skywarn Meeting will be held beginning at 10:00 AM on March 19th at Maple Grove Fire Station #2

(13450 Maple Knoll Way, Maple Grove, MN 55369).

Ryan Kelzenberg announced that during the March Metro Skywarn Board Meeting nominations



and elections will be conducted for two open positions.

Metro Skywarn Spotters who are interested in the available positions are requested to attend the meeting and self nominate for the available positions.

Contact Ryan Kelzenberg ([ryan@metroskywarn.org](mailto:ryan@metroskywarn.org)) with any questions.

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## ARES Breakfast

Saturday March 12th  
7:30AM  
Perkins Restaurant  
Savage, MN

# NECOS Schedule February 2016

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

## February

Feb 22 KD0UWZ Chad  
Feb 29 KB0FH Bob

## March

Mar 7 WA0DGW John  
Mar 14 KC0YHH Tony  
Mar 21 KD0UWZ Chad  
Mar 28 KB0FH Bob

## April

Apr 4 WA0DGW John  
Apr 11 KC0YHH Tony