



ARES COMMUNICATOR

Information for Scott County Amateurs



April, 2013

Accurate, Reliable Emergency Communications for our Community

Volume 13, Number 4

Severe Weather Awareness Week

April 15-19, 2013

For more than 25 years, the state of Minnesota has conducted a Severe Weather Awareness Week in partnership with the National Weather Service and local governments.

The information campaign is designed to teach and remind Minnesotans about weather hazards and provides resources to minimize the risks associated with severe weather.

Using this site as a guide, everyone is encouraged to make a plan build an emergency kit and practice their emergency plans.

The main event of Severe Weather Awareness Week is the annual statewide tornado drills. These drills are scheduled for Thursday, April 18 at 1:45 p.m. and 6:55 p.m. At those times, sirens and NOAA Weather Radios are will sound in a simulated tornado warning. The first drill is intended for institutions and businesses, while the evening drill is intended for second shift workers and especially families.

Why Severe Weather Awareness Week? According to the National Weather Service, Minnesota experiences an average of 40 tornadoes per year. In 2012, 37 twisters touched down. A record was set in 2010 with 104 tornadoes across the state.

Understanding this threat and knowing what to do when a tornado is approaching can save lives.

Take advantage of Severe Weather Awareness Week to review your own and your family's emergency procedures and prepare for weather-related hazards.

Each day of the week will focus on a different topic:

Monday — Alerts and Warnings

Tuesday — Severe Weather, Lightning and Hail

Wednesday — Floods

Thursday — Tornadoes (with statewide tornado drills)

Friday — Extreme Heat

As part of the National Weather Service Severe Weather Awareness Week, Metro Skywarn will be holding two practice nets during the drills on Thursday, April 18.

Severe Weather *cont'd on page 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!

Emergency Alerts by Phone

The Scott County Sheriff's Office has upgraded its emergency mass notification system. The system, CodeRED, is a high-speed telephone

emergency notification service allowing public safety agencies the ability to deliver pre-



Keeping citizens informed.

recorded information to targeted areas within the county.

There are several types of situations which *could* lead to a notification from CodeRED, including-

Emergencies, including Amber Alerts, Evacuations, Active Shooters, wildfire, etc.

General Alerts which include Road Closures, Utility Outages, Water Main breaks, etc.

Weather includes the events as: Tornado, Flash Flood, Thunderstorm or Winter Storm Warnings

It is important to note that CodeRED is provided as a supplemental emergency communication method and should not be relied upon exclusively.

CodeRED will attempt to deliver the message to each registered number up to 3 times in order to maximize the number of delivered messages.

CodeRed *cont'd on page 2*

ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, April 13th

Digital Monday, April 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

Severe Weather - cont'd from page 1

The National Weather Service will be issuing a Tornado Watch at 1pm followed by a Tornado Warning at 1:45 pm and then again at 6:55 pm.

Metro Skywarn will be activating at 1:30 pm and 6:30 pm. The Skywarn net will be taking check-ins during those times. Around 1:45 pm and 6:55 pm, net control will be announcing the tornado warnings for Hennepin County. At this point you will be able to report false items you are seeing.

Usually everyone wants to report a tornado, but please also practice other reportable conditions as well to give our net control operators experience handling different priority reports. Please also be short and realistic with your reports and help with the scenario. For example, if someone reports a tornado near Lake Minnetonka, the next place it would likely go is Minnetonka, then Golden Valley, then St. Louis Park and so on (multiple tornadoes are also allowed!)

Net Control will continue to take reports until they have died down with a planned closing of the net at 2:15 and 7:15.

Please note, if we are anticipating severe weather that day (HA!), we will cancel the drill. Please watch Metro Skywarn Info for emails.

You can find more information and related links at: <https://dps.mn.gov/divisions/hsem/weather-awareness-preparedness/Pages/severe-weather-awareness-week-program.aspx>

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Test Your NIMS Knowledge

This month we will continue our review of ICS-700a: National Incident Management System (NIMS) An Introduction. Check your recall of the course material with this question.

Exercises should:

- Include multidisciplinary, multi-jurisdictional incidents.
- Include participation of private-sector and nongovernmental organizations.
- Cover aspects of preparedness plans, including activating mutual aid and assistance agreements.

- A. Contain a mechanism for incorporating corrective actions.
- B. Have consequences for inadequate performance.
- C. Be repeated until performance is at an acceptable level.
- D. Be based on the most catastrophic scenario that could affect the community.

Check next month's ARES Communicator for the solution

March NIMS Knowledge Solution

1. To better serve their constituents, elected and appointed officials should do the following, EXCEPT FOR:

- D. Assume the role of incident commander for all incidents and direct the on-scene technical operations from the Emergency Operations Center.



Code Red - cont'd from page 1

The messages will consist of six key elements:

1. Statement that it is a CodeRED emergency message from Scott County Sheriff's Office.
2. Time and date of the call.
3. Scope of the emergency.
4. Area(s) affected by emergency.
5. Action that needs to be taken.
6. Directions for obtaining more information.

Although many landline telephones are automatically registered with the emergency notification database, you are encouraged to go online and register your own personal information.

By doing so, you will be ensuring that the data pertaining to you and your home is as accurate as possible.

You can register for the CodeRED system here: <http://www.co.scott.mn.us/PublicSafetyJustice/CountySheriff/Pages/Sheriff.aspx>



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2013 World Amateur Radio Day

April 18th
Celebrates 100 Yrs of Disaster Communications

This year marks the 88th anniversary of the founding of the International Amateur Radio Union (IARU). To mark this occasion, the IARU and its more than 160 Member Societies will celebrate World Amateur Radio Day on April 18. For many years, the IARU Administrative Council has declared a theme for each World Amateur Radio Day. The theme for 2013 is *Amateur Radio: Entering Its Second Century of Disaster Communications*.

The theme commemorates the first known use of Amateur Radio in a disaster situation: Herbert V. Akerberg — a 15-year-old from Hilltop, Ohio — is believed to be the first person to use Amateur Radio to call for help during a disaster. In late March 1913, the Scioto River in downtown Columbus, Ohio flooded its banks, killing more than 100 people. According to a November 2012 article in *The Columbus Dispatch*, Akerberg used his home radio transmitter to send SOS calls via Morse code for nearly 72 hours.

According to the *Dispatch*, Akerberg's services were "highly commended by the city authorities, and his achievement widely heralded over the country as a new contribution to the comparatively new science of radio." Herbert Akerberg passed away in Scottsdale, Arizona on November 6, 1964.

Stations On the Air for World Amateur Radio Day
Several IARU Member Societies — and clubs related to them — will have special event stations on the air in celebration of World Amateur Radio Day. As of April 4, these stations include:
4A8DMR: FMRE — Mexico's IARU Member Society — with the help of Grupo DXXE, will activate 4A8DMR, a unique prefix, for the first time. DMR stands for Día Mundial del Radioaficionado, or World Amateur Radio Day. This station will be active from April 18-21 on all bands from 160-6 meters in all modes, including EME, as well as on Amateur Radio satellites from different grid squares throughout Mexico. QSL via N7RO and LoTW.

CR5LARU: REP — Portugal's IARU Member Society — will be on the air April 13-19 on all bands. QSL via CT1REP (bureau or direct).

KP4FD: To echo the theme for this year, the Puerto Rico Field Day Group will be active on April 18 from the Emergency Management Agency of the city of Cataño, Puerto Rico. QSL via LoTW.



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FCC Relinquishes Amateur Radio Licensing

WASHINGTON D.C. April 1, 2013 — In a shocking and unexpected move, the FCC today transferred all amateur radio licensing responsibility to QRZ.com, releasing Report and Order 2013-699. Outgoing Chairman Julius Genchowski read a statement noting that the decision was due to a combination of automatic budget cuts from budget sequestration and an acknowledgement of reality.

Other commissioners released similar written statements. The Report and Order stated, "Our enforcement bureau received an inquiry from a radio amateur who was banned from QRZ.com ("QRZ"), an amateur radio portal and a popular callsign database. After his callsign listing was removed from the QRZ database, amateurs frequently questioned on the air whether he was really licensed. On a few occasions he was actually referred to as a 'bootlegger' by other radio amateurs, a derogatory term for an unlicensed individual operating illegally. Our research indicates that few licensees actually use the FCC ULS [the official online licensing database] for amateur radio license queries. In this ruling we have identified an opportunity to shed the responsibility of licensing and reduce administrative costs, and are therefore transferring administration of amateur radio licensing to a private entity."



At press time ARRL had not released a written statement due to a backlog in the ARRL email server, still processing emails from a month ago. However, in a conference call this afternoon it was announced that ARRL was petitioning the FCC to withdraw the R&O until it could present its solution for privatizing amateur radio licensing, a solution employing 65,535 bit encryption technology which would be ready sometime in 2019.

QRZ praised the FCC change and announced that for a limited time free Extra class upgrades will be included with an XML subscription or purchase of Ham Radio Deluxe. QRZ forums were abuzz, with both support for and opposition against the change. One super moderator stated that QRZ super moderators will have enforcement privileges, with the ability to revoke licenses for bad behavior both online and on the air, later taunting to users to step out of line and "feel his wrath."

The FCC announcement is the most notable change in US amateur radio licensing since the controversial and still-debated Incentive Licensing program, and will go into effect upon publication of the Report and Order in the Federal Register.

(Ed Note: Take another look at the date of the article!)

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The Skirmish !

Digital Prefix Contest

Attention all you Digital Denizens out there in Radio Land! Are you ready to Skirmish? TARA style, that is, on Saturday April 20, 2013 from 0000Z through 2359Z.

Dust off those rig interfaces. Adjust your sound cards. Sort out the cables. Fire up the software.

This is a multi digital mode operation, each mode being a separate entry. This contest is great for you prefix hunters. There may be many new or rare prefixes heard.

Review the Macros and check out the rules at www.n2ty.org/seasons/tara_dpx_rules.html The basics for the event are as follows:

Exchange: Send *name + prefix*

Operating Modes: *PSK, RTTY, Hell, MFSK, MT63, Throb, ASCII, SSTV, Domino EX, ALE400, JT65* and *Packet*.

Power Classes: *High* - legal limit, *Low* - 100w max., *Great* - 20w max., *QRP* - 5w max

Band: Use the regular digital frequencies/mode on 160,80,40,20,15,10 & 6m.

Score Points: Stations can be worked once on each band for points. Each different prefix counts as a multiplier. One time only. Not per Band.

Power Mults for Tourney Calculation: *QRP* = $\times 30$, *Great* = $\times 20$, *Low* = $\times 10$, *Legal Limit* = $\times 5$ as defined above.

Total Score: $\text{Total Score} = \text{QSO's} / \text{band} \times \text{total different Prefixes}$.
 $\text{Tourney Score} = \text{QSO's} / \text{band} \times \text{total different Prefixes} \times \text{Power Mult}$.

TARA contests are always a lot of fun to work and this prefix skirmish is no exception! Fire up those soundcard interfaces and have some fun!

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NBEMS Current Versions

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

Here are the most recent releases as of April 15, 2013.

Software	Version
Fldigi	3.21.70
Flwrap	1.3.4
Flmsg	1.1.29

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.

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VOA Radiogram

VOA Radiogram is a Voice of America program experimenting with digital text and images via shortwave broadcasting. It is produced and presented by Dr. Kim Andrew Elliott.



VOA Radiogram transmission schedule: (all days and times UTC):

Sat 1600-1630 17860 kHz

Sun 0230-0300 5745 kHz

Sun 1300-1330 6095 kHz

Sun 1930-2000 15670 kHz

All via the Edward R. Murrow transmitting station in North Carolina. The specific digital modes may vary day-to-day so check the VOA site (<http://voaradiogram.net/>) for up to date info.

To decode the digital text and images transmitted on VOA Radiogram, download Fldigi, Flmsg and Flamp from the usual source at: <http://www.w1hkj.com/> More shortwave broadcasters experimenting with digital text include:

Radio 700 Kurzwelldienst in Euskirchen, Germany, a shortwave broadcaster using 1-kilowatt transmitters, is experimenting daily with the PSKR250 digital text mode centered on 2000 Hz:

0557 UTC on 6005 and 7310 kHz

1555 UTC on 7310 kHz

1655 UTC on 6005 kHz.

PCJ Radio International - Taiwan-based PCJ Radio International will conduct another digital text experiment via WRMI, Radio Miami International, UTC 7 April 2013, 0227-0230, using the MFSK32 mode. WRMI is on 9955 kHz. This weekend's message will be in Spanish.

The Mighty KBC - Netherlands-based The Mighty KBC will, as usual, include digital and images in its North America broadcast, Sunday 7 April 2013 at 0000-0200 UTC on 7375 kHz via Nauen, Germany (125 kW). At about 0133 UTC, MT63-2000 (long interleave) will be centered on 1500 Hz. At just before 0200 UTC, an image in MFSK32 will be centered on 1500 Hz.

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The Heart of Portable Comms

Ward Silver, N0AX
ARES E-letter March 20, 2013

Back about 20 years ago, NiCd batteries were notorious for having a pronounced memory effect caused by a special type of crystal formation within the battery. This particular mechanism has been eliminated in current NiCd cells but our memory of it, so to speak, is long.

Today's batteries all have some kind of memory in which the capacity of the battery changes with patterns and depths of discharge. Each type of battery chemistry exhibits this effect for different reasons - some types stronger than others. Unfortunately, it's also referred to as a "memory effect" which is confusing to those of us who remember the old "memory effect." Nothing like calling two different things by the same name to generate a lot of confusion!

Because this effect varies with battery type, blanket statements about it are unwise. Isidor Buchmann's *excellent* and very readable book, *Batteries In a Portable World*, and its sibling website, www.batteryuniversity.com, tackle the full spectrum of battery types and how to apply them. On the website, I highly recommend taking the opportunity to read the section "How to Prolong Battery Life." The book is available from the [ARRL Store](http://www.arrrl.com) and other book sellers. Both should put a charge into your understanding of this important energy source that is crucial to effective emcomm operation. Good luck and may your batteries live long and prosper!

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Sea Eagle Launch



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. Here is this month's sample:

1. What does the Q signal "QRV" mean?
 - A. You are sending too fast
 - B. There is interference on the frequency
 - C. I am quitting for the day
 - D. I am ready to receive messages
2. What are the objectives of the Amateur Auxiliary?
 - A. To conduct efficient and orderly amateur licensing examinations
 - B. To encourage amateur self regulation and compliance with the rules
 - C. To coordinate repeaters for efficient and orderly spectrum usage
 - D. To provide emergency and public safety communications
3. What skills learned during "hidden transmitter hunts" are of help to the Amateur Auxiliary?
 - A. Identification of out of band operation
 - B. Direction finding used to locate stations violating FCC Rules
 - C. Identification of different call signs
 - D. Hunters have an opportunity to transmit on non-amateur frequencies

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

March General Pool Answer

1. What does the Q signal "QRQ" mean?
 - A. Send faster
2. What is the Amateur Auxiliary to the FCC?
 - A. Amateur volunteers who are formally enlisted to monitor the airwaves for rules violations
3. Which of the following describes an azimuthal projection map?
 - A. A world map projection centered on a particular location

BREAK - OVER



GULF OF ADEN - A Scan Eagle, an unmanned aerial vehicle is launched from the flight deck of the amphibious transport dock ship USS San Antonio (LPD 17). Scan Eagle is a runway independent, long-endurance, unmanned aerial vehicle system designed to provide multiple surveillance, reconnaissance, and battlefield damage assessment missions. San Antonio is deployed as part of the Kearsarge Amphibious Ready Group and, with the embarked 26th Marine Expeditionary Unit (26th MEU).

Shipwreck Brew

Old Brew to Live Again!

Produced at least as far back as 5,000 BC, beer has been with us for a long time. But coming third only to water and tea in terms of worldwide popularity means that the lifespan of individual beers is more likely to be measured in days or weeks rather than years or decades. The exception is if they're preserved at the bottom of the Baltic Sea in a shipwreck. One such shipwrecked beer that is about 170 years old has been salvaged and analyzed and will be reproduced using modern industrial techniques.

The five bottles of beer, which are amongst the oldest preserved beers in the world, were salvaged in 2010 from a shipwreck that is believed to have sunk in the Åland archipelago southwest of Finland in the 1840s. The darkness inside the wreck and the low temperatures found on the seabed 50 m (164 ft) below the surface provided the perfect storage conditions, while the pressure inside the bottles kept the salt water from leaking in through the cork.

Thankfully, the salvage team didn't crack open the beers to toast their find, which also included old bottles of champagne. This gave a team at the VTT Technical Research Centre of Finland the chance to analyze the beer and recreate the original recipe for modern industrial production methods. The Stallhagen brewery of Åland will now use the recipe to reproduce the historic beer.

All finds from the shipwreck belong to the Government of Åland, an autonomous region of Finland, which has decided that part of the profits from sales of the beer will go to charitable causes. These include marine archeological work and environmental measures to improve the water quality of the seas.

The shipwreck beer is set to go into production later this year with beer connoisseurs able to try it in June 2014. *(Ed's Note: The Åland Islands are a prized catch when working DX countries.)*

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One of the beers recovered from the sea floor



National Grilled Cheese Sandwich Day

April 12, 2013

It's actually National Grilled Cheese Sandwich Month! Although it only requires three ingredients (bread, cheese, and butter), grilled cheese is one of the most popular comfort foods in the world.

The Ancient Romans were the first civilization to make a cooked bread and cheese sandwich, but many cultures have invented their own take on this ancient dish.

In France, people enjoy Croque Monsieur (a grilled ham and cheese sandwich) while in Switzerland it is customary to melt the cheese and toast the bread separately before combining them. The classic American grilled cheese sandwich emerged in the 1920s when inexpensive cheese and affordable sliced bread became available. It is now a staple in cafés, diners, and school cafeterias across the country.

To celebrate National Grilled Cheese Sandwich Day, enjoy a grilled cheese sandwich cooked your favorite way and served with a side of tomato soup!



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ARES Breakfast

Saturday April 13th
7:30AM
Perkins Restaurant
Savage, MN

NECOS Schedule April 2013

1 Apr	W0NFE Bob
8 Apr	KB0FH Bob
15 Apr	KC0YHH Tony
22 Apr	N0PI Dan
29 Apr	W0NFE Bob
6 May	KB0FH Bob
13 May	KC0YHH Tony
20 May	N0PI Dan
27 May	W0NFE Bob
25 May	KB0FH Bob