



ARES COMMUNICATOR

Information for Scott County Amateurs



November, 2016

Accurate, Reliable Emergency Communications for our Community

Volume 16, Number 11

SKYWARN Recognition Day

Get Your Radio On: December 3

ARRL Letter

The annual SKYWARN™ Recognition Day (SRD) will be held this year on Saturday, December 3, 2016. This is the day when Amateur Radio operators visit National Weather Service (NWS) offices and contact other operators around the world. The purpose of the event is to recognize the vital public service contributions that Amateur Radio operators make during National Weather Service severe weather warning operations. It also strengthens the bond between Amateur Radio operators and the local National Weather Service. The event is co-sponsored by ARRL and the National Weather Service. Please remember that this is not a contest, so no scoring will be computed.



Object: For all radio amateur stations to exchange QSO information with as many National Weather Service stations as possible on 80 through 10 meters, including 6 and 2 meters bands and the 70 centimeter band. Contacts via repeaters are permitted.

Date: National Weather Service stations will operate December 3, 2016, from 0000 - 2400 UTC.

Exchange: Call sign, signal report, QTH, and a one or two-word description of the weather occurring at your site.

Modes: National Weather Service stations will work various modes including SSB, FM, AM, RTTY, CW and PSK31. While working digital modes, special event stations will append "NWS" to their call sign (e.g. NØA/NWS).

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

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Station Control Operator: It is suggested that during SRD operations, a non-National Weather Service volunteer who is a licensed radio amateur serve as a control operator for the station that is set up at a NWS office.

New this year: There will be a new log submission process introduced this year, and W1AW at ARRL Headquarters is scheduled to be on the air for SKYWARN Recognition Day. More details will be released later. More information about this event may be found here: <http://www.wrh.noaa.gov/mtr/hamradio/>

BREAK - OVER



ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, December 10th

Digital Monday, December 12th

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

NetProtocols

Tips: Net Protocols for Practice

ARES E-letter

Like many groups, the Hospital Disaster Support Communications System (HDSCS) holds a weekly net, but the HDSCS net focuses on practicing procedures related to functioning in a real net during an emergency. While we practice taking turns at being net control, members also must copy down check-ins and information given on the net. Sometimes net participants are asked to move to other frequencies identified by tactical reference. This week, after check-ins were taken, members were asked to move to simplex on the output of our primary net repeater.

Then the check-ins were roll called. Not only was this little task a way to make sure members could make the adjustments on their equipment to respond on the output, but it also allowed members to serve as relays when necessary.

Should our primary repeater go down in a major emergency, we would maintain a presence on the output of our repeater to listen for, not only our members, but for other groups that might need to contact us.

Most members made it to the output of the repeater quickly and then learned what they could hear. Two stations were particularly valuable in their ability to hear stations in the Laguna Niguel area as well as the southeast part of Orange County. All check-ins were accounted for in the roll call by the net control, with some help from stations that were able to relay for others. It was an instructive exercise that will get repeated again.

from the Hospital Disaster Support Communications System report for October 16, 2016; April Moell, WA6OPS, HDSCS, Orange County, California

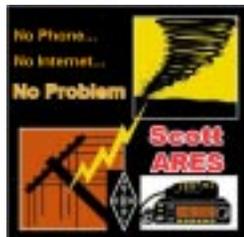
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Sunspot Cycle

At lowest level in 5 years

<http://spaceweather.com/>

The sun has looked remarkably blank lately, with few dark cores interrupting the featureless solar disk. This is a sign that Solar Minimum is coming. Indeed, sunspot counts have just reached their lowest level since 2011. With respect to the sunspot cycle, you are here:

The solar cycle is like a pendulum, swinging back and forth between periods of high and low sunspot number every 11 years. These data from NOAA show that the pendulum is swinging toward low sunspot numbers even faster than expected. (The red line is the forecast; black dots are actual measurements.). Given the current progression, forecasters expect the cycle to bottom out with a deep Solar Minimum in 2019-2020.

Solar Minimum is widely misunderstood. Many people think it brings a period of dull quiet. In fact, space weather changes in interesting ways. For instance, as the extreme ultraviolet output of the sun decreases, the upper atmosphere of Earth cools and collapses. This allows space junk to accumulate around our planet. Also, the heliosphere shrinks, bringing interstellar space closer to Earth; galactic cosmic rays penetrate the inner solar system *and our atmosphere* with relative ease. Meanwhile, geomagnetic storms and auroras will continue—caused mainly by solar wind streams instead of CMEs. Indeed, Solar Minimum is coming, but it won't be dull.



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.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!

November 28, 2016 Monday 6:00 PM

SMARTS

Dale A. Blomgren (952) 402-2155

Email: kd0b@arrrl.net

Location: Carver County Library

7711 Kerber Blvd

Chanhassen MN 55317

Walk-ins allowed, Pre-reg requested

December 3, 2016 Saturday 10:00 AM

St Paul Radio Club

Leon H. Dill (651) 688-9964

Email: w0coe@arrrl.net

Location: Ramsey Co Library Maplewood

3025 Southlawn Dr

Saint Paul MN 55109-1577

Walk-ins allowed, Pre-reg requested

December 14, 2016 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

December 19, 2016 Monday 6:00 PM

SMARTS

Dale A. Blomgren (952) 402-2155

Email: kd0b@arrrl.net

Location: Carver County Library

7711 Kerber Blvd

Chanhassen MN 55317

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. In what ITU region is operation in the 7.175 to 7.300 MHz band permitted for a control operator holding an FCC-issued General Class license?
 - A. Region 1
 - B. Region 2
 - C. Region 3
 - D. All three regions
2. Where is an S meter found?
 - A. In a receiver
 - B. In an SWR bridge
 - C. In a transmitter
 - D. In a conductance bridge
3. How much must the power output of a transmitter be raised to change the S- meter reading on a distant receiver from S8 to S9?
 - A. Approximately 1.5 times
 - B. Approximately 2 times
 - C. Approximately 4 times
 - D. Approximately 8 times

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

BREAK - OVER



October General Pool Answers

1. Which of the following can be the result of an incorrectly adjusted speech processor?

All of these choices are correct

 - A. Distorted speech
 - B. Splatter
 - C. Excessive background pickup
2. What does an S meter measure?
 - C. Received signal strength
3. How does an S meter reading of 20 dB over S-9 compare to an S-9 signal, assuming a properly calibrated S meter?
 - D. It is 100 times stronger

How Will You Communicate?

by Icom America

Communication is essential, although we often take it for granted. Today we live in a world where information is instantly available. But what if there is an emergency situation and our communication tools are no longer working? How will you contact loved ones or emergency personnel? September is recognized as National Preparedness Month. Icom America wants to provide our customers with some communication solutions, which could be helpful during an emergency.

Cell Phones

Cell phones are part of our daily lives, however they have vulnerabilities, especially during an emergency. Networks can fail. Cell towers or satellites could go down. Regardless of any failures, cell phones can still be extremely useful. Wireless Emergency Alerts (WEA) messages can be received by your cell phone, even if the network is congested.

If using a cell phone for emergency communications remember CHARGE, WAIT, TEXT:

1. CHARGE: Make sure your main battery is charged and you have a spare cord and battery back up.
2. WAIT: If a call does not go through, wait 10 seconds before trying again.
3. TEXT: For non-emergencies try to send text messages only. During network congestion a text may go through easier.

Email & Social Media

If you have access to the internet, try emailing or posting updates on social media. Both are great ways to keep family and friends informed on your whereabouts and status.

Pay Phones

Who would have guessed pay phones had an important role to play in today's world of emergency communication solutions. Most pay phones are still on landlines. When other forms of communication are down, pay phones may become the best option.

Two-Way Radio

Within crowded scenarios, two-way radios are a helpful form of communication. Similar to a walkie-talkie radio system, Family Radio Service (FRS) is a two-way, short-distance, hand-held radio. Channels are not private and the radio does need line of site to function, but a FCC license is not required to operate an FRS radio.

Satellite Phones

Satellite phones, while pricy, are a good communication solution, as they will usually work even if the network fails.

However, satellite phones need a direct line to a satellite, making their service spotty if one is not available or if a satellite goes down.

HAM Radio

If a catastrophe disables power grids and cell towers, amateur radio delivers a crucial emergency communication solution. Amateur or HAM radio has become the go-to communication system for most emergency response systems, like MARS (the Military Auxiliary Radio System) and ARES (Amateur Radio Emergency Service). There are over 800,000 licensed amateur radio operators, and many are trained as communications support for public safety teams.

Anyone can become a HAM, they just need an amateur radio license. If you are a licensed HAM radio operator, plan ahead, and let your family know what frequencies you can be reached on.

Whatever communication solution you decide to go with, make sure you have a communication plan and keep printed copies of all necessary contact numbers. Remember to visit Icom to learn about more radio communications solutions.

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Don't Pound My Octothorpe

If you want to spark a conversation at your next social event, ask everyone the proper name for this symbol: #. Most North Americans will probably say *pound sign* or perhaps *number sign*.

It helps to have an international audience, since a person from the UK will likely call it the *hash* symbol. Lately, the world of Twitter (and other social media) has made extensive use of # to tag keywords, referring to it as the *hash* mark used to create *hashtags*. A musician might claim that it is the *sharp* symbol from musical notation but closer examination reveals that the sharp symbol is quite different.

The AT&T engineers working on the original DTMF system adopted the name *Octothorpe* for this symbol. There are various explanations and anecdotes that have developed over the years concerning how this happened.

Various forms of spelling show up in the literature (octatherp, octothorp, etc.). Doug Kerr's story is particularly interesting and available on the internet (<http://dougkerr.net/Pumpkin/articles/Octatherp.pdf>).

There are US Patents that use the word "octothorp" to refer to the # symbol. Patent number 3920926 uses "octothorp" for # and "sextile or asterisk" for the * symbol. The term *sextile* never caught on at all.

For amateur radio usage (North America bias), I hear mostly *pound* for # and *star* for *. I suspect that will not change any time soon.

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Surf's Up!

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

Mr. Carlson's Lab

<https://www.youtube.com/user/MrCarlsonsLab/videos>
This YouTube channel covers a wide variety of electronics topics.

Manly-Warringah Radio Society

Sydney Australia
This is the site of a software defined radio (SDR) located in Sydney Australia.
<http://websdr.mwrs.org.au:8901/>

educ8s.tv

<https://www.youtube.com/user/educ8s>
A collection of Arduino, Raspberry Pi and robot projects. New videos posted weekly.

Project Box

<https://www.youtube.com/watch?v=Ur6HzV1stFg>
Now that you have that fancy gizmo, build an enclosure!

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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 November 20, 2016.

Software	Version
Fldigi	3.23.16
Flwrap	1.3.4
Flmsg	4.0.0
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.



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. Select the TRUE statement:

- A. When a new Incident Commander assumes command, the outgoing Incident Commander should be demobilized to avoid confusion
- B. Upon arriving at an incident the higher ranking person will either assume command, maintain command as is, or reassign command to a third party
- C. A lower ranking but more qualified person may not be designated as the Incident Commander
- D. Transfer of command procedures are implemented at the Emergency Operations Center before the Incident Commander arrives at the scene

Check next month's ARES Communicator for the solution

BREAK - OVER

October NIMS Knowledge Solution

1. Which Section is responsible for handling claims related to property damage, injuries, or fatalities at the incident?
- B. Operations Section

BREAK - OVER

Deep Thoughts



A Veteran Died Today

He was getting old and paunchy
And his hair was falling fast,
And he sat around the Legion,
Telling stories of the past.

Of a war that he once fought in
And the deeds that he had done,
In his exploits with his buddies;
They were heroes, every one.

And 'tho sometimes to his
neighbors
His tales became a joke,
All his buddies listened quietly
For they knew where of he spoke.

But we'll hear his tales no longer,
For ol' Joe has passed away,
And the world's a little poorer
For a Veteran died today.

He won't be mourned by many,
Just his children and his wife.
For he lived an ordinary,
Very quiet sort of life.

He held a job and raised a family,
Going quietly on his way;
And the world won't note his
passing,
'Tho a Veteran died today.

When politicians leave this earth,
Their bodies lie in state,
While thousands note their
passing,
And proclaim that they were great.

Papers tell of their life stories
From the time that they were young,
But the passing of a Veteran
Goes unnoticed, and unsung.

Is the greatest contribution
To the welfare of our land,
Some jerk who breaks his promise
And cons his fellow man?

Or the ordinary fellow
Who in times of war and strife,
Goes off to serve his country
And offers up his life?

The politician's stipend
And the style in which he lives,
Are often disproportionate,
To the service that he gives.

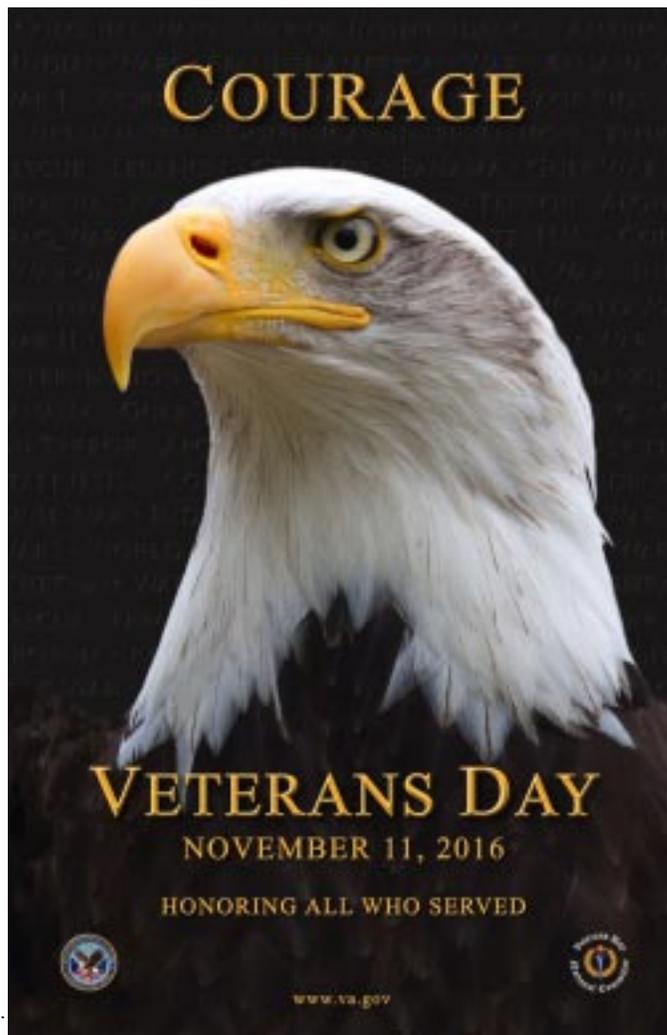
Or would you want a Veteran
His home, his country, his kin,
Just a common Veteran,
Who would fight until the end.

He was just a common Veteran,
And his ranks are growing thin,
But his presence should remind us
We may need his likes again.

For when countries are in conflict,
We find the Veteran's part,
Is to clean up all the troubles
That the politicians start.

If we cannot do him honor
While he's here to hear the praise,
Then at least let's give him homage
At the ending of his days.

Perhaps just a simple headline
In the paper that might say:
"OUR COUNTRY IS IN
MOURNING,
A VETERAN DIED TODAY."
BREAK - OVER



While the ordinary Veteran,
Who offered up his all,
Is paid off with a medal
And perhaps a pension, small.

It is not the politicians
With their compromise and ploys,
Who won for us the freedom
That our country now enjoys.

Should you find yourself in danger,
With your enemies at hand,
Would you really want some cop-out,
With his ever-waffling stand?



Thanksgiving Quiz

1. What percentage of Americans eat turkey on Thanksgiving?
A. 67
B. 76
C. 88
2. In the early 1900s, wild turkeys were in danger of becoming extinct. How many wild turkeys currently live in North America (not just in the United States)?
A. More than 20 million
B. More than 7 million
C. More than 3 million
3. It's unclear whether turkey was eaten at the first Thanksgiving, although historians know the Pilgrims frequently consumed the fowl. However, there was one meat specifically named by an eyewitness as part of the meal. It was:
A. Pigeon
B. Duck
C. Venison
4. Which founding father once quipped that the turkey was a more "respectable bird" than the bald eagle to serve as America's national emblem?
A. Alexander Hamilton
B. Benjamin Franklin
C. George Washington
5. In what year did Congress pass legislation to declare the official date of Thanksgiving to be the fourth Thursday of November?
A. 1912
B. 1864
C. 1941
6. Even though it was held on Thanksgiving, the Macy's parade was initially called the Christmas Parade since it was created to launch the Christmas shopping season. In what year did the first Macy's Christmas Parade take place?
A. 1924
B. 1934
C. 1914
7. Detroit Lions owner George A. Richards started a team tradition of playing a game on Thanksgiving Day in order to attract publicity and sell tickets. What year was the first Detroit Lions Turkey Day game?
A. 1974
B. 1934
C. 1954

8. Which team did the Lions play in that first game?
A. Chicago Bears
B. Green Bay Packers
C. New York Giants
9. The Thanksgiving long weekend contains some of the busiest air-travel days in the United States. Of all of the days in that Wednesday to Sunday period, which is the busiest travel day?
A. The Wednesday before Thanksgiving
B. The Saturday after Thanksgiving
C. The Sunday after Thanksgiving
10. In the 1960s, police officers in this major American city were the first to dub the day after Thanksgiving "Black Friday" because of the bad traffic and bad behavior occurring on that day. Which city was it?
A. Philadelphia
B. Los Angeles
C. Chicago

BREAK - OVER

- Thanksgiving Quiz Answers
1. C. 88
 2. B. More than 7 million
 3. C. Venison
 4. B. Benjamin Franklin
 5. C. 1941
 6. A. 1924
 7. A. 1974
 8. A. Chicago Bears
 9. C. The Sunday after Thanksgiving
 10. A. Philadelphia



ARES Breakfast

Saturday
December 10th
7:30AM
Perkins Restaurant
Savage, MN

NECOS Schedule November 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

- | | |
|---------------------|--------------------|
| Nov 21 | KB0FH Bob |
| Nov 28 | WA0DGW John |
| December | |
| Dec 5 | KD0UWZ Chad |
| Dec 12 | KB0FH Bob |
| Dec 19 | WA0DGW John |
| Dec 26 | KD0UWZ Chad |
| January 2017 | |
| Jan 2 | KB0FH Bob |