



# ARES COMMUNICATOR

## Information for Scott County Amateurs



November, 2010

Accurate, Reliable Emergency Communications

Volume 10, Number 11

### ARRL Sweepstakes!

Nov. 6<sup>th</sup> and Nov. 20<sup>th</sup>

ARRL Sweepstakes has been part of Amateur Radio in the US and Canada for more than 75 years. In 2010, the tradition continues with the 77th running of the best domestic contest in all of Amateur Radio:

The CW will be the weekend of November 6 from 2100 UTC Saturday, November 6 through 0300 UTC Monday, November 8. The Phone portion of the contest runs the weekend of November 20 from 2100 UTC Saturday, November 20 through 0300 UTC Monday, November 22. Why not make plans now to join thousands of other radio amateurs across the continent and get in on this year's fun in the ARRL November Sweepstakes!



Sweepstakes has a couple of twists that set it apart from other contests. The most notable difference in the information exchanged by the two stations. Sweepstakes uses the skills hams use in traffic handling in the exchange which includes; consecutive serial number, precedence (transmitter power and station type), callsign, a check number (usually the last two numbers of the year you were first licensed), and your ARRL section. A typical exchange might be: 076 A N0ARS 78 MN. This unique exchange represents the seventy sixth contact by a single operator low power station with a callsign of N0ARS first licensed in - - 78, located in Minnesota. See how accurate exchange of this information, on a crowded frequency, will sharpen your traffic handling skills?

During sweepstakes you can operate for only 24 of the thirty hour contest period and listening time counts as

**Sweepstakes** *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!

### Dora the Explorer Found!

Shakopee Marathon for Non-public Education

The weather was great, the crowd excited, and the amateur radio volunteers in place. On you mark get set – GO! The walking and riding participants were off! The Shakopee Area Catholic Schools Marathon for non-public education was off to a great start.

The brisk fall Saturday morning in early October provided good conditions for Scott ARES volunteers and walkers. The spirited event went off with few hitches, except – Dora the Explorer was LOST!

A nervous Dad approached the communications table and asked if the hams could locate his daughter? He explained he last saw her with some of her friends and now she was missing. Dad gave a rapid description of his daughter with the most recognizable feature being the Dora the Explorer sweatshirt she was wearing. While the Dad provided more specific details, Grandma came up to the table offered her help.



**Marathon** *cont'd on page 3*

### ARES Activities

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

**Breakfast Saturday, November 13th**

**Digital Monday November 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: 3.605 mhz

#### NETS WITH OUR NEIGHBORS

North Dakota: Daily 3.937 mhz 6:30pm  
South Dakota: Daily 3.870 mhz 6:00pm  
Wisconsin: Daily 3.985 mhz 5:30pm  
Iowa: Daily 3.970 mhz 12:30/5:30pm

## Sweepstakes - cont'd from page 1

operating time. There is a minimum of 30 minutes for time outs.

This may sound complicated but after listening to some sweepstakes activity the rhythm or the exchange will be evident. Now is the time to sharpen your pencils, get you log ready and practice you traffic handling skills. There are a number of computer logging programs, many freeware, that do a great job tracking your contacts and preparing the format to enter the contest. You can find complete contest info at: <http://www.arrrl.org/sweepstakes>.

Fire up that radio and get on the air and have some fun!

BREAK - OVER

Q. What did one elephant say to the other elephant?

## Daylight Savings Time

"Fall Behind" one hour  
Sunday November 7th



A. Nothing! Elephants can't talk.

### Scott County ARES Contacts

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## Test Your NIMS Knowledge

ARES members are familiar with the Incident Command System from their study of the FEMA Institute courses. Now it is time to see how much you remember from those courses! Each month you will have the opportunity to test your ICS knowledge on a questions dealing with one ICS area.

This month we will take a look at some of the concepts from the IS-100 course, Introduction to Incident Command System. This is the first of the FEMA courses all ARES members must complete before participating in any response activities. You can find the course materials at this site: <http://training.fema.gov/EMIWeb/IS/is100.asp>. Now, test your knowledge of the ICS.

Here is the question for this month:

Which incident facility is positioned outside of the present and potential hazard area, but close enough to the incident to maintain command?

- A. Incident Command Post
- B. Command Center
- C. Operations Station
- D. Staging Area

Check next month's ARES Communicator for the solution



## October NIMS Knowledge Solution

ICS has been used to manage incidents such as fires, earthquakes, hurricanes, and acts of terrorism. Which of the following situations represents another viable application for the use of ICS?

- A. The planning and operation of the Central City annual Labor Day celebration, including a parade and fair.

## Marathon - cont'd from page 1

Grandma's description and Dad's didn't exactly draw the same picture! Never the less, the hams stationed along the marathon route began spreading the word to the other Marathon volunteers to be on the lookout for Dora.

After about ten minutes the call came in that Dora was safe and sound at "Tent #2". Dora was reunited with Dad and Grandma after Dora identified the adults. Whew! Dora's descriptions were right on the mark!

In addition to providing communications support for the school's annual fundraiser the ARES volunteers practiced their skills in portable operation including crossband through mobile radios from their handhelds. Lots of sun, no rain, and a couple of hours of fun summed up the morning for the Scott ARES members and a successful fundraiser was the result for the school.

The following pictures tell the rest of the story. (photos by W0NFE)



Walking, riding, or biking the marathoners kept up a brisk pace around the course. Scott ARES members were posted at the locations along the busiest streets. Traffic cones lined the busier sections of the course to alert drivers to the presence of the walkers and bikers.



The Scott ARES crew, bundled up prior to the start of the marathon, take a break from the pre-event briefing. Pictured (l to r) Dan N0PI, Stan KB0CQ, Bob W0NFE, Tony KC0YHH, Bob KB0FH.



School volunteers staffed check-points through out the marathon route. Here, Stan, KB0CQ, (left) provides communications for two happy marathon volunteers





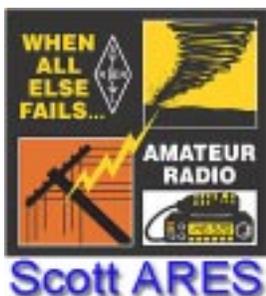
The crowd was excited awaiting the starting gun for the Marathon for non-public education at the Shakopee Area Catholic Schools early on the Saturday morning.



The East school entrance was the hub of activity for the marathon. This Scott ARES operating spot was a main contact point for marathoners. Bob, KB0FH, manned the post and served as NECOS for the event.



One of the busier posts along the marathon was the corner of 17<sup>th</sup> Ave and Sarazan across from St. Francis Medical Center. Tony, KC0YHH, provides the communications link for the marathon staff and served as back-up NECOS.



A few of the first bikers in the event approach the corner of Independence Dr. and Valley View Rd. Dan, N0PI, was the Scott ARES contact for this check point.



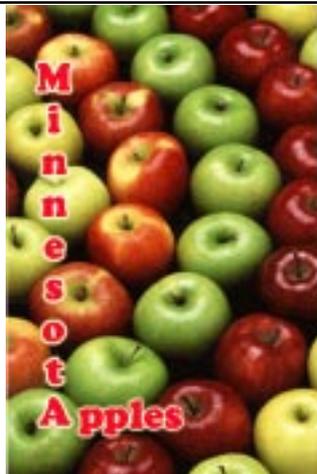
## October Crossword Solution

### Across

2. PRAIRIE SPY—Large, firm, dense fruit that is excellent for baking and long-term storage. Tree is very vigorous and productive. Introduced in 1940. Ripens late October.
3. ZESTAR—Large, crunchy, juicy red fruit with a sprightly sweet-tart flavor. Excellent for both fresh eating and cooking. The fruit will store for 6 to 8 weeks. Tree is vigorous, upright and ripens late August to early September
5. SWEET SIXTEEN—Crisp and juicy with an exotic yellow flesh and a very sweet, unusual sugar cane or spicy cherry candy flavor. The fruit stores for 5 to 8 weeks. Tree is very vigorous and fruit may be subject to premature drops. Introduced in 1977.
7. FROSTBITE—Intensely sweet, firm and juicy flesh. Stripped maroon-red and gold-yellow, 2 1/2" diameter fruit. Excellent for cider. Introduced in 2008. Ripens late September to mid-October.
11. HARALSON—Firm texture with a complex tart flavor. Good for fresh eating and cooking. Especially good pie apple. The fruit will store for 4 to 5 months. Tends to be biennial bearing. Introduced in 1922. Ripens late September to early October.
12. HONEY GOLD—Golden to yellow-green fruit that is sweet, crisp, and juicy. Excellent for fresh eating and also good for cooking. The fruit will store for 2 to 3 months. Introduced in 1970. Ripens late September.
13. SNOW SWEET—Savory, sweet tasting apple, with a slight tart balance and rich overtones. Amazingly slow to turn brown when cut. Appealing, large, bronze-red blush fruit. Excellent for fresh eating, snack trays, and salads. Introduced in 2006. Ripens mid-October.
14. KEEPSAKE—Very hard and crisp with yellow flesh and an exotic sweet, spicy flavor. Good for fresh eating and cooking. The fruit will store for 6 months. Introduced in 1978. Ripens mid-October.

### Down

1. REGENT—Appealing red-striped apple with well-balanced flavor that is good for eating and cooking. The fruit will store for 4 to 5 months. Introduced in 1964. Ripens early to mid-October.
4. STATE FAIR—Striped red, juicy, moderately tart fruit good for eating and cooking. The fruit will store for 2 to 4



## Sad News From Duluth, MN

A. Nony Moose, Roving Correspondant

DULUTH, MN There is some very sad news coming out of Duluth, Minnesota this week. This will bring far reaching ramifications that will strike at the very core of our Midwest Heritage and Souls.

Reports contain the tragic news that Ole has been shot. He was up by the Canadian border on his 4-wheeler cutting some trees when some border patrol rangers looking for terrorists spotted him.

According to the news reports, the rangers shouted to him over a loudspeaker, "Who are you and what are you doing?" Ole shouted back, . . ."BIN LOGGIN!"

Ole is survived by his wife Lena and good friend Sven.



BREAK - OVER



cont'd from col. 1

to weeks. Somewhat prone to biennial bearing. Introduced in 1977.

6. FIRESIDE—Very large fruit with sweet flavor and fine-grained flesh good for fresh eating, salad, and baked apples. Tree is vigorous and weeping. Introduced in 1943. Ripens mid-October.

8. REDBARON—Medium-size red and yellow apple with juicy flesh and a mild sweet flavor. Good for fresh eating with a storage life of 4 to 5 weeks. Introduced in 1970. Ripens mid-September.

9. HONEY CRISP—Large, dappled red fruit with a well-balanced flavor, outstanding crispness and juiciness. Best for fresh eating and salads as the flesh is slow to brown. Fruit will easily store 7 or more months. With more than 3 million trees planted, this is easily the most popular U of M introduction to date. Introduced in 1991.

10. BEACON—Bright red apple with soft, juicy flesh and a slightly tart flavor. Introduced in 1936. Ripens mid- to late August.

BREAK - OVER

## Cleaner Coal

### Innovation by a MN Cooperative

Employing ingenuity and extensive research, staff at Great River Energy's Coal Creek Station developed a system for refining coal that has the world taking notice. Visitors from as far away as China and Australia have come to Underwood to see the new process that Coal Creek Station put into full operating mode last December after spending a dozen years developing and testing the equipment. Trademarked as DryFining for its ability to dry and refine lignite coal, the process is unique in the way it integrates into the plant's overall operation.

Charlie Bullinger, senior principal engineer at Great River Energy, said drying coal is nothing new. Lignite, a lower rank coal, varies around the world in its water content but can be as much as 70 percent water, he said. North Dakota lignite is also comparatively high in ash residue at 10 to 12 percent. Bullinger and fellow Great River Energy engineer Mark Ness knew that reducing those two percentages would mean better plant efficiency when they set out in 1997 to create a better fuel. Some of their early numbers showed the plant was experiencing 21 percent efficiency loss in its boiler, of which 13 percent was due to water and hydrogen in the fuel. They also knew the plant could save \$1 million a year by making as little as a 1 percent improvement in the heat rate.

In 2002, Great River Energy received funding help from North Dakota's Lignite Energy Council to establish a pilot project using a 2.5-ton-an-hour fluidized-bed dryer. The results of the study led the U.S. Department of Energy and Great River Energy to enter a collaborative agreement for another phase of testing. A 115-ton-per-hour prototype was built to supply about a sixth of the coal used by the station's 546-megawatt Unit 2. The project's second phase was a full-scale commercial demonstration that featured four modules, each capable of processing coal at 135 tons an hour for Unit 2. Because the prototype worked so well, Great River Energy also installed four modules for Unit 1, servicing the entire 1,129-megawatt plant. Construction was completed in 2009 and dedicated last June.

DryFining has reduced lignite moisture to about 29 percent and increased the heat content by about 14.5 percent, which has increased plant efficiency. There's also an emissions benefit from using waste heat that normally would leave the cooling tower as steam or water. Great River Energy hired an independent consultant to collect

*cont'd col. 2*

## History of Veterans Day

Veterans Day, a holiday celebrating military service men and women, is one of the least understood of the national holidays. Often confused with Flag Day or Memorial Day, the history of Veterans Day focuses on honoring living veterans rather than those who have fallen, and this important holiday deserves to be more widely recognized and celebrated.

Commemorated on November 11 or the weekday that falls closest to November 11, Veterans Day was once known as Armistice Day and was created in 1938 to celebrate the end of World War I. While President Woodrow Wilson first declared Armistice Day in 1919 on the first anniversary of the end of fighting, it wasn't until the late 1930s that Armistice Day became a federal holiday. At that time, this legal holiday was held to promote world peace and celebrate the service of soldiers in every military branch.

In 1954, while working under President Dwight D. Eisenhower, Congress passed an amendment changing the name of the holiday to Veterans Day, in order to include soldiers who had also fought in both World War II and the Korean War. Today, it is a day to honor any veterans of any war and falls on November 11 unless that date occurs on a weekend. Then, observances are held on either the previous Friday or the following Monday.

Primarily, the difference between Veterans Day and Memorial Day is that Veterans Day focuses on honoring those living who are veterans of the military. Whether serving during war or peace, veterans put their lives on the line and dedicate their careers to protecting the rights and freedoms of the United States of America. A similar holiday is celebrated in France, Great Britain and Canada, again starting out as a day to honor the end of World War I and expanding to become a holiday to honor veterans for their patriotism and honorable service.

*BREAK - OVER*



*cont'd from col. 1*

data to measure the improvements. The prediction was for a 40 percent reduction in sulfur dioxide and mercury and 20 percent reduction in nitrous oxide. Results showed reductions of 54 percent in sulfur dioxide, 37 percent in mercury and 32 percent in nitrous oxide. The emissions reductions contribute to the financial incentive to use DryFining.

*BREAK - OVER*

## 'Cyber Marines' may stay in U.S.

Marines pride themselves on being expeditionary, but a new career path could keep some of them at home, in front of a computer, for their entire time in the Corps.

Plans are in the works for a potential slate of new careers and enticements that would build a cadre of specialized computer warfare technicians who wouldn't necessarily need to branch out to get promoted, the top general responsible for cyberwarfare told House lawmakers Sept. 23.

Lt. Gen. George Flynn, deputy commandant for combat development and integration, told a House Armed Services Committee panel that tomorrow's cyber-Marines could essentially spend their entire careers without deploying, instead taking recruiting duty or other jobs.

"One thing that we have to take a look at is, once you get somebody schooled in this area and they become an effective operator, they need to stay in it. And so we're going to have to take a look at career progression [in which it] isn't going to be acceptable to somebody not to have to go out of occupational specialty assignment to get promoted," Flynn said. "This may be the case where, once you're in cyber, you never leave the cyber, something like we do with some of our special operations units."

Although Flynn had few specifics for what Marine officials could be cooking up, he did mention that cyber-Marines could have longer enlistments, of which about two years would be spent just in training, and there may be special bonuses or other lures to keep them in the force.

Flynn and the top cyberwarfare commanders of the other three services, who appeared with him, acknowledged the military will not be able to compete with the private sector in paying top dollar for cyber experts. But, they said, they're confident they can recruit specialists with the promise of high-quality training and their pitch of joining the few and the proud.

"Just like we see young Marines now returning again and again to Afghanistan, sometimes it's just the opportunity to do what you like doing, and being part of something that's bigger than yourself," he said.

Flynn also reassured lawmakers that the Marine Corps was cognizant of potential cyber threats to the power stations, waterworks and other utilities that serve its bases from outside the wire.

Rep. James Langevin, D-R.I., asked the service cyber chiefs what they were doing to safeguard their bases in the U.S. from "Die Hard"-style attacks on the power grid, which could threaten them by targeting networks outside their immediate military purview.

"Sir, one of the additional hats that I wear is I oversee a  
*cont'd col. 2*

## Two Million US PCs Recruited To Botnets

More than 2.2 million US PCs were found to be part of botnets, networks of hijacked home computers, in the first six months of 2010, according to a report compiled by Microsoft. The research revealed that Brazil had the second highest level of infections at 550,000. Infections were highest in South Korea where 14.6 out of every 1000 machines were found to be enrolled in botnets. The 240-page Microsoft report took an in-depth look at botnets which, said Cliff Evans, head of security and identity at Microsoft UK, now sat at the center of many cybercrime operations.

"Most people have this idea of a virus and how it used to announce itself," he said. "Few people know about botnets." Hi-tech criminals use botnets to send out spam, phishing e-mails and launch attacks on websites. Owners of botnets also scour infected machines for information that can be sold on the underground auction sites and markets found online.

Botnets start when a virus infects a computer, either through spam or an infected web page. The virus puts the Windows machine under the control of a botnet herder. "Once they have control of the machine they have the potential to put any kind of malicious code on there," said Mr Evans. "It becomes a distributed computing resource they then sell on to others." Some, he said, were being worked very hard by their owners.

With the significant number of holes identified on the same day, businesses will be racing against time to fix them all," Alan Bentley senior vice-president, Lumension Microsoft's research revealed that a botnet called Lethic sent out 56% of all botnet spam sent between March and June even though it was only on 8.3% of all known botnet IP addresses. "It's phenomenal the amount of grip that thing has," said Mr Evans.

Despite the large number of people being caught out, Mr Evans said that defending against malware was straightforward. He said people should sign up for automatic updates, make sure the applications they use are regularly patched, use anti-virus software and run a firewall.

*BREAK - OVER*

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## Cyber Marines *cont'd from col. 1*

base a little bit south of here," Flynn began — referring to Marine Corps Base Quantico, Va. "One of the key things we've done is we've identified all our critical infrastructure, so we know where all the critical nodes are, whether it be in power, water supply, or anything else that may pass through the base."

*BREAK - OVER*

## THE FINAL INSPECTION

Author Unknown

The Soldier stood and faced God,  
Which must always come to pass.  
He hoped his shoes were shining,  
Just as brightly as his brass.

'Step forward now, Soldier ,  
How shall I deal with you?  
Have you always turned the other cheek?  
To My Church have you been true?'

The soldier squared his shoulders and said,  
'No, Lord, I guess I ain't.  
Because those of us who carry guns,  
Can't always be a saint.

I've had to work most Sundays,  
And at times my talk was tough.  
And sometimes I've been violent,  
Because the world is awfully rough.

But, I never took a penny,  
That wasn't mine to keep...  
Though I worked a lot of overtime,  
When the bills just got too steep.

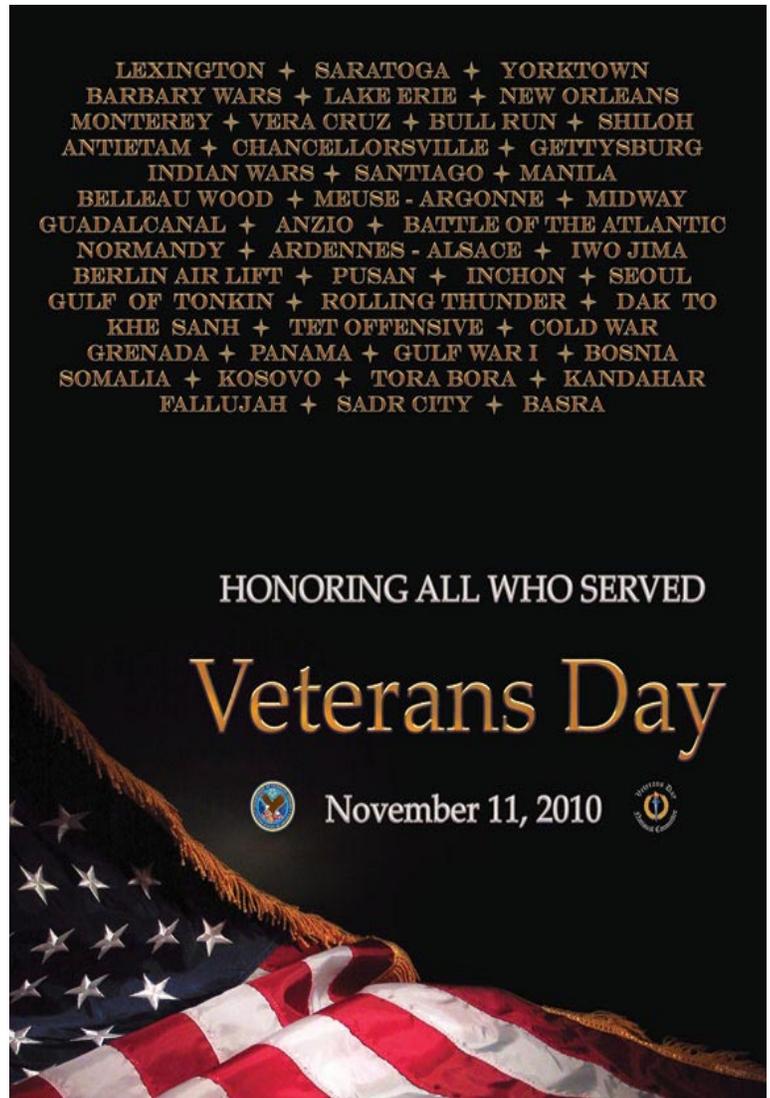
And I never passed a cry for help,  
Though at times I shook with fear..  
And sometimes, God, forgive me,  
I've wept unmanly tears.

I know I don't deserve a place,  
Among the people here.  
They never wanted me around,  
Except to calm their fears

If you've a place for me here, Lord,  
It needn't be so grand.  
I never expected or had too much,  
But if you don't, I'll understand.

There was silence all around the throne,  
Where the saints had often trod.  
As the Soldier waited quietly,  
For the judgment of his God.

'Step forward now, you Soldier,  
You've borne your burdens well.  
Walk peacefully on Heaven's streets,  
You've done your time in Hell.'



**ARES Breakfast**  
Saturday November 13th  
7:30AM  
Perkins Restaurant  
Savage, MN

### NECOS Schedule November 2010

1 Nov KB0FH Bob  
8 Nov KC0YHH Tony  
15 Nov N0PI Dan  
22 Nov W0NFE Bob  
29 Nov KB0FH Bob  
6 Dec KC0YHH Tony  
13 Dec N0PI Dan