



# ARES COMMUNICATOR

## Information for Scott County Amateurs



October, 2012

Accurate, Reliable Emergency Communications for our Community

Volume 12, Number 10

### CFF Cycle for Life a Success!

Dark, cold, windy, and wait is that rain on the window? Weather before the start of the Cycle for Life on that Saturday morning was a shock! The Scott ARES members gathered for the pre-event briefing were glad to have the shelter of the Bracketts Crossing Clubhouse. Warm drinks helped as well.

What was the reason for this oh-dark-thirty meeting? The MN / Dakota chapter of the Cystic Fibrosis Foundation (CFF) was kicking off their first annual Cycle for Life CFF fundraiser. The event drew 70 registered riders and over 45 volunteers for the morning activity.



The cyclists began to arrive and register as the communicators headed for their rest stop locations along the 63 mile and 32 mile road courses. Their goal was to be set-up and operational on the directed net before the riders crossed the starting line.

Some rest stops had small yagis installed the previous afternoon as a result of propagation testing the week before the event. The rest stop tents were welcome shelter from the weather. With transceivers connected and crossband operation configured in most locations, the net was ready to go at the start of the event.

ARES members handled the routine administrative communications for the served agency that are key to the smooth operation of a road-course event: "Where is the Turtle vehicle?" "Have the riders reached your rest stop yet?" "How many riders have cleared you location?" "Call in and report when the pick-up crew arrives and the site is cleared." "Has anyone seen the

**Cycle for Life** *cont'd on page 3*

### Jamboree-on-the-Air

The Jamboree-on-the-Air, or JOTA, is an annual Scouting event that uses amateur radio to link Scouts around the world, around the nation, and in your own community. Held on the third full weekend of October each year, this worldwide jamboree requires no travel, other than to a nearby radio amateur's ham shack.

The 55th Jamboree-on-the-Air is October 20-21, 2012. The official hours are from Saturday at 00:00 hours local time (right at midnight Friday) to Sunday 24:00 (midnight Sunday evening). So you've got the whole weekend to make JOTA contacts.



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### ARES Activities

**Weekly Net Monday 7 PM 146.535 mhz (s)**  
**Breakfast Saturday, October 13th**  
**Digital Monday, October 15th**

#### ARES Nets

MN ARES Phone Net		
	6:00PM Sunday	Freq: 3.568 mhz
ARRL MN Phone Net		
	12:00p, 4:30p CST Daily	Freq: 3.568 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 3.870 mhz	6:00pm
Wisconsin:	Daily 3.985 mhz	5:30pm
Iowa:	Daily 3.970 mhz	12:30/

The ARES COMMUNICATOR is published for the benefit of Amateur Radio Operators in Scott County and other interested individuals.  
EDITOR: Bob Reid, Scott County Emergency Coordinator  
Snail Mail: 13600 Princeton Circle  
Savage, MN. 55378  
E-Mail: N0BHC@aol.com  
Phone: Home 952-894-5178 Portable 612-280-9328  
Reader submissions encouraged!

## Test Your NIMS Knowledge

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

1. Homeland Security Presidential Directive 5 (HSPD-5) requires all Federal departments and agencies to:

A. Establish a panel that will evaluate activities at the State, tribal, and local levels to ensure compliance with NIMS.

B. Make adoption of NIMS by State, tribal, and local organizations a condition for Federal preparedness assistance (through grants, contracts, and other activities).

C. Create NIMS strike teams that can manage incident operations if a local government fails to comply with NIMS.

D. Implement NIMS as the doctrine for how best to organize and manage all routine, day-to-day department/agency operations.

*Check next month's ARES Communicator for the solution*

## Sept NIMS Knowledge Solution

1. Select the TRUE statement:

B. Span of control is accomplished by organizing resources into Teams, Divisions, Groups, Branches, or Sections

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### Scott County ARES Contacts

Emergency Coordinator  
Bob Reid N0BHC  
13600 Princeton Circle  
Savage, MN 55378  
952-894-5178  
N0BHC@arrl.net

Asst. Emergency Coordinator  
Bob Minor W0NFE  
5210 West 141<sup>st</sup> Street  
Savage, MN 55378  
952-894-2657  
W0NFE@arrl.net

Asst Emergency Coordinator  
Daniel Vande Vusse N0PI  
5722 West 141<sup>st</sup> Street  
Savage, MN 55378  
952-440-1878  
N0PI@arrl.net



## WiGig – The New Speedster

Many home and business local area networks (LANs) built around the 802.11n standard are starting to buckle under the strain placed on them by an ever-increasing number of wireless devices clamoring for bandwidth. A new technology known as WiGig is looking to clear the bottleneck by offering transfer rates 10 times that of the fastest 802.11n networks. At its Intel Developer Forum (IDF) 2012 in San Francisco, Intel demonstrated WiGig multigigabit wireless docking technology that has the potential to remove almost all wires trailing to and from a computer.

Operating over the unlicensed 60 GHz frequency band, WiGig is designed to deliver data transfer rates of up to 7 Gbit/s. This will allow it to wirelessly transmit video and audio data from a source to a display or speakers in addition to wireless LAN capabilities. Intel demonstrated just such an application by wirelessly connecting an Ultrabook laptop to an external HDD and then playing a video from the HDD on a monitor connected only over WiGig.

“Even multiple displays can be docked at one time,” said Intel Chief Technology Officer Justin Rattner in his keynote last Thursday, adding, “I look forward to the day when docking my Ultrabook or tablet will not even need to be a conscious exercise – it will be as simple as dropping the device anywhere on my desk and having it automatically connect to a display and peripherals, no wires attached.”

WiGig is backwards compatible with 802.11 and will also support beamforming, allowing connectivity over 10 meters (33 ft).

Dr. Ali Sadri, President and Chairman of the Wireless Gigabit (WiGig) Alliance, the not-for-profit standards organization responsible for developing the technology, says that WiGig technology is nearly ready, with chips from a number of WiGig member companies already in production. The WiGig standard is expected to be certified in mid02013, after which Sadri foresees a “real explosion in the number of WiGig devices coming to market.”

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## Cycle for Life *cont'd from page 1*

traffic control for this site?" All routine information to contribute to a smooth event handled using the directed net procedures ARES members practice weekly on the training net. Fortunately there were no serious medical issues or major mechanical problems during the ride.

The riders raised about \$30,000 for the Cystic Fibrosis Foundation on this first annual event for the Chapter.

Cystic fibrosis is an inherited chronic disease that affects the lungs and digestive system of about 30,000 children and adults in the United States. Since 1955, the Cystic Fibrosis Foundation (CFF) has been the driving force behind the pursuit of a cure. Today, the Cystic Fibrosis Foundation is the world's leader in the search for a cure for cystic fibrosis.

In the 1950s, few children with cystic fibrosis lived to attend elementary school. Today, advances in research and medical treatments have further enhanced and extended life for children and adults with CF. Many people with the disease can now expect to live into their 30s, 40s and beyond.

The CFF is a nonprofit donor-supported organization dedicated to attacking cystic fibrosis from every angle. Their focus is to support the development of new drugs to fight the disease, improve the quality of life for those with CF, and ultimately to find a cure.

Was the event a success? Well, Scott ARES has been asked to circle the date in September, 2013 for the Second Annual Cycle for Life! Right now the date is a week earlier on the calendar. Can't do too much about the lack of daylight but not having to drag out the winter coat and hot coffee might be a nice change to hope for.

You can find the Minnesota chapter CCF web page: <http://www.cff.org/Chapters/minnesota/>.

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A number of the 70 cyclists participating gather near the starting line after completing registration prior to the start of the CCF cycle for Life event. (W0NFE photo)



The ARES communications team bundled up prior to the start of the ride. Pictured (L to R) Tony KC0YHH, George K0GCP, Matt KC0VRV, John WA0DGW, and Dan N0PI. Photo by Bob W0NFE, NECOS.



The site layout for the event resulted in a three story building between the radio communications table and the stations on the course. The solution was a J-pole on a 25 foot mast (on the left above) driven by a mobile transceiver (in white car behind pine tree) cross-banding with a HT from the NECOS location. (W0NFE photo)

## Cycle for Life Photos - cont'd from page 3



The 'Lima 2' rest stop was the halfway point of the long course. Cyclists stopped for water, comfort, and a break from the wind. Dan, N0PI, staffed this location crossbanding to his mobile transceiver with an HT. (N0PI photo)



The comforts of Lima 3 were located in Elko at the southeast corner of the course. Tony, KC0YHH, (in vest) staffed this location along with CFF volunteers. Communications were handled with a transceiver and a small (4 el.) beam elevated on a 25 foot mast attached to the tent support (right in photo). (N0PI photo)



The Lima 2 antenna farm was made up of Dan's, N0PI, hitch mounted portable mast supporting a 4 element yagi. Dan crossbanded to the transceiver installed in the truck. (N0PI photo)



Professional bike mechanics were available near registration at Brackett's Crossing for bike maintenance work prior to the start of the event. The mechanics also roamed the route in the Support and Gear vehicles to assist with mechanical problems, cyclist support, and tire repairs.

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## 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 is a practical way to avoid harmful interference when selecting a frequency to call CQ on CW or phone?
  - A. Send "QRL?" on CW, followed by your call sign; or, if using phone, ask if the frequency is in use, followed by your call sign
  - B. Listen for 2 minutes before calling CQ
  - C. Send the letter "V" in Morse code several times and listen for a response
  - D. Send "QSY" on CW or if using phone, announce "the frequency is in use", then send your call and listen for a response
2. What frequency should be used to send a distress call?
  - A. Whatever frequency has the best chance of communicating the distress message
  - B. Only frequencies authorized for RACES or ARES stations
  - C. Only frequencies that are within your operating privileges
  - D. Only frequencies used by police, fire or emergency medical services.
3. Who may be the control operator of an amateur station transmitting in RACES to assist relief operations during a disaster?
  - A. Only a person holding an FCC issued amateur operator license
  - B. Only a RACES net control operator
  - C. A person holding an FCC issued amateur operator license or an appropriate government official
  - D. Any control operator when normal communication systems are operational

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

## September General Pool Answer

1. When selecting a CW transmitting frequency, what minimum frequency separation should you allow in order to minimize interference to stations on adjacent frequencies?
  - B. 150 to 500 Hz
2. What is the customary minimum frequency separation between SSB signals under normal conditions?
  - B. Approximately 3 kHz
3. What is the "DX window" in a voluntary band plan?
  - A. A portion of the band that should not be used for contacts between stations within the 48 contiguous United States

## Superior - Duluth Flooding

In June, Superior, Wisconsin and Duluth, Minnesota roads and bridges were washed out, and five feet of standing water was left in low-lying areas. Water rescues were effected, entire neighborhoods were evacuated, highways were cut off, and Internet and cell service was gone on the North Shore of Minnesota.

Members of the Douglas County ARES/RACES team went to work. Douglas Nelson, AA0AW, and Garry Hooghkirk, KD0DHB, organized an effort to staff the Douglas County EOC, provided mutual aid across the border to the St. Louis County EOC and the National Weather Service's Duluth office. It took many hours to get the Lake County, Minnesota EOC open, due to road closures.

This team worked with many local radio amateurs to collect information on road closures and damage reports from throughout the area. They also provided the only link to the outside world for



The cause of the ASER activation call-out just below the north bound expressway bridge... the remnant of the fiber cable conduit. "End of the line!"

Lake and Cook counties in Minnesota, established contacts with Life Flight services for the Grand Marais Hospital, handled traffic for doctor exchanges on the North Shore and provided support for Emergency Management in the region. Upon receiving the news of service restoration for the North Shore, the crews at the EOCs stood down. Many of the members of the Douglas County, Wisconsin ARES/RACES team live right across the border in and around Duluth. The cooperation across state lines is tremendous on both sides of the border.

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## School Club Round-up 2012

The School Club Roundup (SCR) is sponsored by the ARRL, its Hudson Division Education Task Force and the Long Island Mobile Amateur Radio Club (LIMARC), to foster contacts with and among school radio clubs.

The SCR is a great way to get young operators on the air. Very often a new operator will be intimidated by the fear of not knowing what to say to the stranger on the other side of the radio. The exchange information helps to overcome this fear in a low pressure contest format. Operators are encouraged to take some time to chat beyond the contest exchange.

Award certificates will be issued for the following US and DX categories: Schools: Elementary, Middle/Intermediate/Junior High School, High School and College/University.

The week-long event is the third full week in October beginning at 1300 UTC Monday, Oct. 15<sup>th</sup> thru 2359 UTC Friday, Oct. 19<sup>th</sup>.

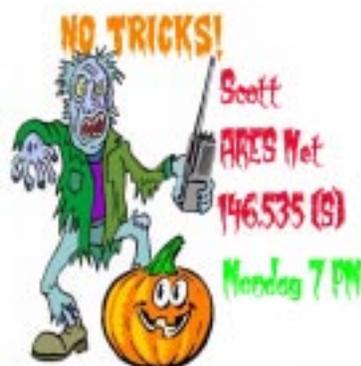
Information exchanged during a contact includes: call sign, signal report, class (Individual, Club, or School), and state (MN). Stations may be contacted once each on phone and digital (CW, packet, RTTY and other modes count as digital). No repeater contacts except satellite and "real time" packet. Count 1 point for each phone QSO and 2 points for each digital QSO.

The multiplier used to compute the contest score is: [Number of States plus Canadian Provinces/Territories plus DX countries/entities] plus 2x [Number of Clubs contacted] plus 5x [Number of Schools contacted]. (*School stations and Marty, KA2NRR get a multiplier of 5, which should make them the most desirable stations to work.*)

There are a number of logging programs available to keep track of all the contest math and reporting. You will find a round-up of software options at: <http://home.earthlink.net/~scr-log/>.

You can find the contest activity concentrated in the following frequencies.

- Phone (kHz)
- 1855-1865
- 3850-3880
- 7225-7255
- 14,250-14,280
- 21,300-21,330
- 28,440-28,460



## Neighborhood HamWatch in Central Florida

Norman Lauterette, WA4HYJ  
Casselberry, Florida

A new program in central Florida helps neighbors and communities in times of need, with minimal extra effort, right from our own homes: The *Neighborhood HamWatch*. NHW is not an organization. There are no tests to take nor structured organization to follow. It is rather a simple service program where every ham has the opportunity to use his/her license and radio skills right where they live to support their neighbors during times of an extended power outage or isolation in a disaster or incident. All an NHW operator needs is his or her radio and an emergency backup battery or generator power supply.

Neighbors could be physically isolated due to downed trees, wires, flooded rivers or unsafe roadways. Community life is disrupted, a situation that can last for days or weeks. Residents are under stress from electrical and communication blackout and personal isolation. Media reception is disrupted, telephone and cell phone circuits are overloaded or down and the sense of community is shaken. During these periods of isolation, fear and rumors fill the gap created by a lack of official information and the inability to contact someone outside of the affected area.

This is the scenario where *Neighborhood HamWatch* operators activate using their preplanned simplex (with repeater backup) radio relay network to break through the barrier of silence. They can establish two-way communications to alert ARES officials at the EOC, keep local authorities up to date, and reconnect neighbors with friends or relatives outside the affected area with health and welfare traffic. In the program, you're a ham, you're a licensed radio communicator and you know what to do: Know the NHW net frequency, check in, observe your surroundings and gather and report neighborhood messages and conditions, needs and requests.

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### ARES Breakfast

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

### NECOS Schedule September 2012

- 3 Sep KB0FH Bob
- 10 Sep KC0YHH Tony
- 17 Sep N0PI Dan
- 24 Sep W0NFE Bob
- 1 Oct KB0FH Bob
- 8 Oct KC0YHH Tony
- 15 Oct N0PI Dan
- 22 Oct W0NFE Bob