KDØCI's Radio Newsletter

Volume 2 Number 11 - Supporting Amateur Radio in East Central Minnesota - September 25, 2007

HAMS RESPOND AS SEVERE STORMS HIT AREA

Thursday September 20th will not be so fondly remembered by residents of East Central Minnesota as a series of severe thunderstorms spawned heavy rains and paths of destruction across the region.

Kanabec County was particularly hard hit as straight line winds downed trees and knocked out power across a wide area. The city of Ogilvie appeared to receive the most damage as many trees in and around town were uprooted or snapped off. Power was out reportedly for 2700 customers from that same evening until as late as Saturday morning. Mora was also hard hit as power was out throughout much of the town. Kanabec County Sheriff's Deputies sealed off the town following the storm, but property damage to houses and other structures was somehow amazingly limited.

Prior to the storm, the National Weather Service had issued several alerts of severe storm activity farther west. By mid-afternoon, the activity moved into Mille Lacs County where tornado and flash flood warnings were issued, and the high school was locked down. As the activity moved into the area, the local Hams responded. At Milaca, the recently reactivated 145.350 repeater was the hub for Skywarn Weather observers patrolling the area during the afternoon. KCØYUE and NØOK were joined by KDØCI in transmitting observations as stations farther to the south listened in.

The storm that hit Ogilvie formed along the Mille Lacs – Kanabec County line from near the junction of Mille Lacs County Roads 24 and 20, south towards Bock. KDØCI was on Skywarn patrol stationed at the north end and watched the storm form pratically overhead. From there, the storm moved rapidly to the east as he exchanged information with NØOK who was watching the storm from the south. As KDØCI moved out to follow the darker skies east, heavy rain along with pea sized hail moved in behind him from the west, forcing him to stop until the duluge subsided. After a few minutes, the rain subsided enough for him to continue east into Kanabec County.

Wind gusts on the north end of the storm were relatively moderate, in the 25 to 35 miles per hour range, but it would be a far different story to the south. KDØCI turned to go south on Kanabec County Road 10 and continued to just south of County Road 56 where a tree had fallen, blocking the road completely. By that time, warnings had been posted for Kanabec County. Had he been able to continue down County Road 10, he would have seen increased levels of destruction along the rest of the way to Ogilvie, just a few miles farther.

In the wake of the storm, KDØCI expressed some frustration over the continued lack of direct communications with NWS Duluth. Technically, the responsibility for Kanabec County falls under the Minneapolis National Weather Service Office, but since severe storms very often move east or northeast into their coverage areas from Kanabec County, the Duluth National Weather Service Office has a clear interest in having its own Skywarn observers assigned in Kanabec County. A Skywarn Observer in Kanabec County for NWS Duluth, KDØCI said during the Tuesday night net that the links into Duluth, no matter how they might come about, "can't get built fast enough." He went on to say that while the information that was passed along on to Minneapolis via stations listening to the Milaca repeater may have proved valueable, direct communications to Duluth might have saved some time getting warnings issued in Kanabec County and points east. The brunt of the storm however moved southeast towards Isanti and Chisago where warnings had been quickly issued by the Minneapolis National Weather Service office, as well as Pine County which is covered by Duluth. Warning sirens were reportedly never sounded in Ogilvie prior to the storm, so whether a more direct link to the National Weather Service would have made any difference in this case remains an open question. "The storm moved so quickly" KDØCI added, "there was very little time for authorities to respond" to the reports being passed.

The good news is that the area Hams responded to the severe weather threat by establishing communications and passing along observations. Valueable experience was also gained, but with the Highway 23 Communications System still under construction, it may not be until next spring before any value of the system to Skywarn can be assessed. In the meantime, the Milaca repeater will have to be relied on for Skywarn Weather activation. The repeater has excellent coverage, so if communications are established, it should serve the area well for the time being. Other repeaters in the area with Skywarn coverage into Minneapolis are the Cambridge [146.64 Mhz w/146.2 Hz tone], Crown [145.23 Mhz w/127.3 Hz tone] and St Cloud [146.835 w/85.4 Hz tone] repeaters.

This was one of two large trees that fell in the yard of this residence in Ogilvie during the September 20th storm.

FORESTON UHF LINK SITE PLAN PRESENTED TO FORESTON CITY COUNCIL

The plan for the Highway 23 Communications System UHF Link at Foreston was formally presented to the Foreston City Council by Kenny Broshofske KDØCI, and Mille Lacs County Homeland Security Director Mike Smith on Monday September 10th. The presentation explained the details and the value of the system, as well as its possible benefits including the goals for the Foreston site as a possible communications hub for Mille Lacs County.

The council was asked to obtain estimates for a new and secure structure to be built at the site for housing the communications equipment as well as the necessary infrastructure, and ensuring that the land area was available for that purpose.

The council asked that a detailed plan for the structure be submitted so that realistic estimates could be obtained.

While there were questions regarding the placement of the proposed structure in relationship to property lines nearby, as well as infrastructure issues, the council seemed very supportive of the plan.

The proposed site, which would be at the Foreston Municiple Water Tower, currently has no infrastructure in place for housing communications equipment.

KDØCI, who is acting as coordinator for system planning, received word late today from the Minnesota Repeater Council that the Foreston link frequency to Ogilvie at 445.150 Mhz has now been formally assigned.

HAMMING 101 – On Air Testing

One thing about being into ham radio, you often learn as you go about operating practices and procedures. Some Hams offer free “on the air” advice for newcomers. Most of the time they are polite about it, and gratitude should be expressed to those “on the air Elmers”. Once in awhile though, you might run into a rude someone with a chip on their shoulder, [in other words, a lid] so in order to spare you any “on air embarrassment”, I’ll attempt to do the polite thing by passing along some free advice off the air in this series called “Hamming 101”.

In this issue, I’m going to expand on the subject from last issue by talk briefly about “on the air testing”.

If you are an operator who cares about the integrity of your station, you will check your stations antenna system at least periodically. One of the ways to do so is to check the Standing Wave Ratio. This is done by using a device known as an SWR meter. Attaching this meter between your radio and the antenna enables you to test the antenna and coax cable system for an acceptable “forward vs reflected” power ratio.

In simple terms, reflected power is not something you want, because it will eventually damage or even disable your equipment. Generally speaking, an SWR of 1:1 is as good as it gets, at least in theory. In reality however, no antenna system is perfect, so anything close to 1:1 is ideal. If you find your SWR is around 2:1, you might want to check things out. Perhaps there’s a loose connection or a damaged section of coax. If the SWR is higher than 2.5:1, you should get serious about checking things out. If the SWR is 4:1 or higher, you have a problem, and the sooner you fix it the better.

Again, whenever you intend to conduct on air testing like checking the SWR, you should always ask if the frequency is in use. Try to find a frequency that is not in use to do your testing. If you can, try to work with another station while conducting tests. Signal and modulation reports can be immensely valueable as SWR readings alone do not always tell you how your station sounds to others.

Local & Regional Two Meter Repeaters

The following is a list of known repeaters in East Central Minnesota. Clip and post in your shack.

LOCATION	FREQUENCY	OFFSET	PL TONE	CALL SIGN	NOTES
Aitkin	146.805	Minus	156.7	KCØQXC	
Becker	147.345	Plus	85.4	KØOS	
Big Lake	146.775	Minus	None	NØRPP	
Brainerd	145.775	Minus	None	WØUJ	
Brainerd	147.225	Plus	None	WØUJ	
Cambridge	146.640	Minus	146.2	WRØP	Skywarn Minneapolis
Crown	145.230	Minus	127.3	NØGEF	Skywarn Minneapolis
Elk River	146.970	Minus	None	KØCJD	
Foreston	146.745	Minus	107.2	NØGOI	
Giese	146.865	Minus	151.4	KBØQYC	Skywarn Duluth [Future]
Isle	146.610	Minus	None	WBØSYO	
Little Falls	147.315	Plus	123.0	WØREA	
Mahtowa	147.000	Minus	103.5	NØBNG	Skywarn Duluth
Milaca	145.350	Minus	141.3	WBØMPE	PL Tone Is Currently Off
Ogilvie	147.240	Plus	146.2	KDØCI	Under Construction
North Branch	145.230	Minus	100.0	NØKVL	
North Branch	147.315	Plus	91.5	KCØASX	
Princeton	145.470	Minus	114.8	KGØUY	
Princeton	146.895	Minus	203.5	NØRPP	
Rush City	145.330	Minus	None	NØABR	
St Cloud	146.835	Minus	85.4	NØOYQ	Skywarn Minneapolis
St Cloud	146.940	Minus	None	WØSV	
St Cloud	147.015	Plus	100.0	WØSV	Central Region Emergency Net

If you have updates for this list, by all means let me know.

REGIONAL INFORMATION – Courtesy of ARRL & Other Sources

UPCOMING VE TESTING

SPECIAL TEST SESSION – Must Register In Advance
Wednesday October 10th 2007
Sponsor: Kanabec County Sheriff's Reserves
Time: 7 PM
Contact: Jeff Anderson, Kanabec County Sheriff's Office [320] 679-8421
Email: jeff.anderson@co.kanabec.mn.us
VEC: John Smolenski, NØYR n0yr@arrl.net
Location: Kanabec County Sheriff's Office Conference Room
31 North Elm Street
Mora Minnesota 55051

06-Oct-2007
Sponsor: ST PAUL RADIO CLUB
Time: 9:00 AM (Walk-ins allowed)
Contact: DAVID M BUENDING
(952)486-0836
Email: AD2B@ARRL.NET
VEC: ARRL/VEC
Location: ROSEVILLE CITY HALL
2660 COUNTY ROAD C
NW COR CTY RD C & LEXINGTON AV
ROSEVILLE, MN 55101

27-Oct-2007
Sponsor: UNSPONSORED
Time: 8:30 AM (Walk-ins allowed)
Contact: JOHN J SMOLENSKI, NØYR (763)263-8741
Email: N0YR@ARRL.NET
VEC: ARRL/VEC
Location: AMERICAN LEGION
525 RAILROAD DRIVE
ELK RIVER, MINNESOTA 55330

03-Nov-2007
Sponsor: DUNN COUNTY AREA AMATEURS
Time: 9:00 AM (Walk-ins allowed)
Contact: JAMES L GUENTHER, (715)232-2625
Email: GUENTHERJ@UWSTROUT.EDU
VEC: ARRL/VEC
Location: UNIVERSITY OF WISCONSIN-NW ENTRANCE
121 10TH AVENUE AT S BROADWAY
UW STOUT MILLENNIUM HALL
NITE: 715-235-4488
MENOMONIE, WISCONSIN 54751

24-Nov-2007
Sponsor: UNSPONSORED
Time: 8:30 AM (Walk-ins allowed)
Contact: JOHN J SMOLENSKI, NØYR (763)263-8741
Email: N0YR@ARRL.NET
VEC: ARRL/VEC
Location: AMERICAN LEGION
525 RAILROAD DRIVE
ELK RIVER, MINNESOTA 55330

NET INFORMATION -

Updated July 24, 2007 – Post near your radio for handy reference.

EAST CENTRAL MINNESOTA EMERGENCY PREPAREDNESS NET
Every Tuesday Evening @ 7 PM – 146.565 MHz [Simplex]

Preamble:
This is [your call sign] calling the East Central Minnesota Emergency Preparedness Net. This net meets each Tuesday evening at 7 PM Central Time on a frequency of 146.565 Megaherz for the primary purpose of operator training. This net also provides dissemination of Amateur Radio information and bulletins. All stations are welcome to join the net, and are asked to check in by the use of their call sign only. This is a directed net. Transmit only at the direction of the net control, and please pause between transmissions so others may join our group. Each station will be recognized in the order they check in, and they will be given an opportunity for informal comments. Again, your net control station is [your call sign], my name is [your first name], and I'm located at [your location].

Format:
Standby for Emergency Traffic
Standby for check-ins from Mobile Stations only [Follow by asking for any relays on mobiles]
Standby for Announcements or Bulletins
Standby for general check-ins

Training and/or Informal Session [Standby periodically for any additional check-ins]

Close the net:
Thank all participants; return the frequency to general amateur use.

Other Area & Regional Nets

CENTRAL REGION EMERGENCY PREPAREDNESS NET
First Wednesday of every month @ 1 PM – 147.015 [WØSV Repeater, St Cloud]

UPPER MIDWEST TEN METER NET
Every Thursday Evening @ 8 PM – 28.475 USB [Net Control KBØHDA]

NEWCOMERS NET
Every Monday Evening @ 8 PM – 147.015 MHz [WØSV Repeater, St Cloud]

EMERGENCY & SKYWARN FREQUENCIES
Mille Lacs & Kanabec Counties: 146.565 MHz Simplex
Regional Packet: 145.670 MHz
National Weather Service [Duluth]: 147.00 MHz [Mahtowa], 146.865 MHz [Giese].
National Weather Service [Minneapolis/Chanhassen]: 146.64 MHz [Cambridge], 146.835 MHz [Sauk Rapids].
National Weather Service [Duluth]: 75 Meter Net: 3.810 KHz LSB. Alternate: 3.820 KHz LSB.

Information On The World Wide Web

Information on this and more local and regional Amateur Radio activity is posted on the following websites:

St Cloud Amateur Radio Club	www.w0sv.org
Arrowhead Radio Amateur Club	www.thearac.org
Brainerd Area Amateur Radio Club	www.brainerdham.org

Hams Aid in Capturing Home Invasion Ring

Story courtesy of the ARRL from their website

Some hams in Florida got an earful when they heard what turned out to be teenagers planning various robberies over the Jupiter Farms 444.400 MHz CERT repeater. On September 8, Al Moreschi, AG4BV, of Jupiter, and John Levey, KI4HTL, of Palm Beach Gardens, overheard, according to Moreschi, "what sounded like men talking about committing a burglary and we were monitoring them on one of the local ham repeaters." A retired police officer, Moreschi said he and his fellow hams notified local law enforcement agencies of the break-in, but the alleged thieves "didn't describe the house well enough to get the exact address."

The amateurs kept listening for the vandals to show up again on the repeater. On September 21, they were in luck. This time the hams were ready and had set up recording devices to capture the break-in as it transpired. Moreschi said he and his fellow hams recognized the voices and started recording; they also called the police. The last transmission heard over the air by the suspects was, "Code Red, Code Red, Code Red. There are cops everywhere, dude!" Three suspects were captured and arrested: one at the scene, one who was walking down a nearby road and one at a local grocery store.

An official with the local sheriff's office said that the suspects were charged with burglary for the two break-ins; the three are suspects in other local robberies, as well. The tapes made by the hams are in the custody of the sheriff. Moreschi said that these suspects might also be facing charges from the Federal Communications Commission for operating without an amateur license.

"We don't know how these kids got hold of the ham radios. Their transmissions came right over the CERT repeater, and that has a special tone and you have to have a special tone to key it up," Moreschi said.

FOR SALE

New Tech manual with CD from Gordon West. Below cost $20 with Audio CD. Rob Youcha, Operations AEC with Sherburne County ARES. He can be reached at kc0weo@arrl.net if any others in the group are interested in this material. His cell phone number is 763-228-0843.

COMMENTS AND QUESTIONS

Permission is granted to subscribers to reprint this newsletter for distribution to others. Material herein may be used elsewhere, as long as this newsletter is referenced as the source. Your comments, questions, etc for this newsletter are welcome.

Please take note of the new email address as the old one was discontinued on Monday August 6th. Send your comments, as well as any “newsworthy” items for inclusion to either of my new email addresses.

Primary Email Address: kd0ci@arrl.net [proxy server for kdzeroci@q.com]

Alternate: kd0ci@yahoo.com

73,

Kenny Broshofske KDØCI