



ARES COMMUNICATOR

Information for Scott County Amateurs



December, 2006

Accurate, Reliable Emergency Communications

Volume 6, Number 12

SKYWARN RECOGNITION DAY 2006

Dec. 1, 6PM – Dec. 2, 6PM

The 8th annual SKYWARN Recognition Day special event will take place Saturday, December 2, 2006. SKYWARN Recognition Day is an event co-sponsored by the National Weather Service and the American Radio Relay League, and it is the National Weather Service's way of saying "thank you" to Amateur Radio operators for their commitment to helping keep their communities safe. During the 24-hour special event, amateur radio operators will visit their local National Weather Service (NWS) office, set up Amateur Radio stations, and work as a team to contact other hams across the world.



"Ham radio operators volunteering as storm spotters are an extremely valuable asset to National Weather Service operations since they are cross-trained in both communications and severe storm recognition", says Scott Mentzer, organizer of the event and Meteorologist-In-Charge at the NWS office in Goodland, Kansas.

In typical warning operations, it is the direct communication between mobile spotters and the local NWS office which provides vital ground truth information. Spotter reports of hail size, wind damage and surface-based rotation in real time greatly assists the radar warning operator since that information can be correlated with Doppler radar displays. The result can range anywhere from a more strongly-worded statement to convey a greater sense of urgency, or the issuance of a tornado warning a few minutes earlier than would otherwise have been possible.

Skywarn cont'd 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!

Amateur Band Changes Take Effect

Dec. 15th

With publication in the Federal Register November 15, the long-awaited changes to the amateur rules are set to take effect 30 days later, at 12:01 AM EST December 15. The so-called "Omnibus" Amateur Radio proceeding, WT Docket 04-140, includes a significant expansion of the 75 meter phone band and a variety of other changes.

The highlights:

For Amateur Extra class licensees, the 75 meter phone band will start at 3600 kHz, while Advanced class licensees start at 3700 kHz and Generals at 3800 kHz. The high end of the CW/RTTY/Digital band is now 3600 kHz (although CW is allowed on the entire band).

* On 40 meters, Amateur Extra and Advanced licensees will be able to operate phone beginning at 7125 kHz, while Generals start at 7175 kHz. The top end of the CW/RTTY/Digital band will be 7125 kHz (although CW is allowed on the entire band).

* There are no changes to the 20 meter band.

* On 15 meters, the General class phone band now starts at 21275 kHz.

* On 10 meters, Novice and Technician Plus licensees can now operate CW/RTTY/Digital from 28000 kHz to 28300 kHz.

Band Changes cont'd page 2

ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, Dec. 9th

SELECTED TRAFFIC NETS

Designator	Freq.	Local Times	
MN Phone	3.860Mhz	Noon, 5:30pm	Daily
MN CW	3.605Mhz	6:30pm, 9:50pm	Daily
ARES			
Scott ARES	146.535 S	7:00pm	Monday
Carver ARES	147.165+	8:30pm	Sunday
Neighboring Nets			
North Dakota	3.937Mhz	6:30pm	Daily
South Dakota	3.870Mhz	6:00pm	Daily
Wisconsin	3.985Mhz	5:30pm	Daily

Band Changes *cont'd from pg 1*

* In addition, Novices and Tech Plus licensees can use CW only on the same frequencies as General and Advanced licensees on the 80, 40 and 15 meter bands: 3525 kHz-3600 kHz; 7025 kHz-7125 kHz and 21025 kHz-21200 kHz.

The Report & Order as published in the Federal Register clarified two items that had raised some concerns when it was first released October 10: That the 80/75 meter band split applies to all three IARU Regions, and that FCC licensees in Region 2, which includes North America, can continue to use RTTY/data emissions in the 7075-7100 kHz band.

Several controversial aspects of the proceeding are still to be resolved, although the FCC is working on an erratum for the inadvertent elimination of J2D emissions of more than 500 Hz bandwidth. The Commission released the erratum dealing with the J2D emissions as follows: Data. Telemetry, telecommand and computer communications emissions having (i) designators with A, C, D, F, G, H, J or R as the first symbol, 1 as the second symbol, and D as the third symbol; (ii) emission J2D; and (iii) emissions A1C, F1C, F2C, J2C, and J3C having an occupied bandwidth of 500 Hz or less when transmitted on an amateur service frequency below 30 MHz. Only a digital code of a type specifically authorized in this part may be transmitted.

Still to be resolved are two controversial aspects of the Proceeding:

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Skywarn *cont'd from pg 1*

While National Weather Service offices utilize the real-time reporting of severe weather events to assist in warning operations, hurricanes and tropical storms have shown us that ham radio operators are equally important during the recovery phase of natural disasters. There are countless stories where ham radio worked in tandem with more conventional technology to relay emergency traffic.

SKYWARN Recognition Day event will be held on December 2, 2006, from 0000 UTC to 2400 UTC. The object is for all radio amateur stations to exchange QSO information with as many National Weather Service Stations as possible on 80, 40, 20, 15, 10, 6, and 2 meter bands plus the 70 centimeter band. Contacts via repeaters are permitted.

The exchange should include call sign, signal report, location, and a one or two word description of the weather occurring at your site ("sunny", "partly cloudy", "windy", etc.). NWS 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., N***A/NWS).

The National Weather Service Office in the Twin City area is located at : MN Weather Forecast Office, 1733 Lake Drive West, Chanhassen, MN 55317-8581 , phone 952-361-6670. The Twin City NWS will operate station K0MPX on the 80M/40M/20M/15M/10M HF bands as well as 2M and 440mHz. Operations will run for the 24 hour period, starting at 6PM on Friday December 1st through 6PM Saturday December 2nd.

You will find QSL information for the various participating NWS offices across the United States at <http://www.crh.noaa.gov/hamradio/QslCardInfo.php>. You can earn a SKYWARN Recognition Day certificate by working just one National Weather Service office. All you have to do is submit a list of the NWS stations you worked with a self-addressed stamped envelope to: SKYWARN Recognition Day, 920 Armory Road, Goodland, KS 67735.

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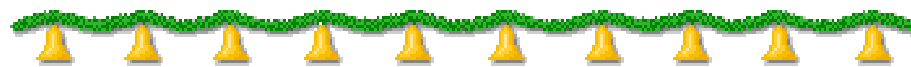
Band Changes *cont'd*

* Expansion of the 75 meter phone band all the way down to 3600 kHz (thus reducing the privileges of General, Advanced and Amateur Extra class licensees, who had RTTY/data privileges in the 80 meter band, and CW privileges of General and Advanced class licensees)

* The elimination of access to the automatic control RTTY/data subband at 3620-3635 kHz.

For more information, see the band chart <http://www2.arrl.org/announce/regulatory/wt04-140/Hambands3_color.pdf>

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GOING OUT WITH VOICES...

Special Celebration Event
2000 GMT on Dec 29 to 2000 GMT on Dec 30.

Hello – celebrating one of the nicest words in any language – is about to come to a close. The campaign to present a friendly image of Amateur Radio to non-hams has been successful beyond even the wildest dreams back in 2005 when it was first planned out. It has shown that active Public Information Officers across the country can be very effective when provided with quality materials. Audio and video public service announcements from the Hello campaign have played on hundreds of stations and even in several other countries. The brochure usage quickly blew through the initial estimate of 40,000 and soon will pass double that at 80,000 or more. The buttons and bumper stickers flew off the tables. Approximately 60 full press books were provided to major news sources giving them background for future use in stories about Amateur Radio and the ARRL. But now it is coming to closure.



Hello was linked to the centennial of voice transmissions over the airwaves. In 1906 Reginald Fessenden was experimenting with voices over radio. There had been a report that he had been heard across the Atlantic, and his plan was to make a formal voice contact from Brant Rock, Massachusetts across the Atlantic to Machrihanish, Scotland. But a storm blew down the antenna at the Scottish site. Fessenden, in true ham spirit, went to “plan B.” Instead of transmitting to Scotland, he used the Brant Rock station to transmit Christmas greetings to ships of the United Fruit Company. (More about this is at <http://www.hello-radio.org/historyofradio.html>). In 2006, hams will complete what Fessenden failed to do in 1906 and achieve Plan A with special event stations. There will be three primary special centennial event stations operating from 2000 GMT on Dec 29 to 2000 GMT on Dec 30. Representing the past are W100BO/W1F at Brant Rock with Steve Barreres, K2CX, as team leader. GB1FVT will be at Machrihanish with Duncan MacArthur, GM3TNT, as team leader. Representing the future will be W1AW in Newington, CT. Information about these three individual keystone can be found at their websites at: <http://groups.msn.com/fessenden>, <http://w1f.k2cx.us>, and <http://www.arrl.org/w1aw.html>.

cont'd col.2

ARISS “CONTINGENCY NETWORK” IMPRESSES NASA

When Russian flight controllers encountered difficulties during a recent International Space Station cargo rocket docking, NASA called on a special — although little-known — Amateur Radio team to stand by if needed. Amateur Radio on the International Space Station (ARISS) Ops Team “ISS Ham Contingency Network” volunteers around the world immediately swung into action. Within 15 minutes of receiving the call from Johnson Space Center, Kenneth Ransom, N5VHO, reported the ISS Ham Contingency Network was ready to provide any necessary communication support.

“The ARISS teamwork was very effective,” ARISS Secretary-Treasurer Rosalie White, K1STO said. “Its members learned a great deal, and they impressed NASA with how quickly the system was brought up.”

During the October 26 Progress docking, NASA says, Russian flight controllers were unable to confirm whether an automated antenna on the rocket had retracted as commanded. If still extended, the antenna could have interfered with the final latching of the supply ship to the ISS. To avoid disturbing the softly docked cargo ship and to aid the crew with docking maneuvers, the ISS orientation was allowed to drift freely.

During free-drift mode, however, the Tracking and Data Relay Satellite System (TDRSS) — which handles communication between the crew and Mission Control in Houston — can be lost. That’s because the station’s solar arrays may not directly face the sun, causing a drop in onboard power.

ARISS *cont'd page 4*



In addition to the site locations showing the past and future of radio, the voice modes used will also reflect both traditional and new technologies. The stations will be operating AM from the early 1900’s. SSB, FM, and Echolink/IRLP will bring the voice technologies through the 1900’s and into the computers of the 21st century. IRLP/Echolink will also allow those whose licenses limit them to VHF/UHF to join in the fun.

You can see the latest information posted at www.hello-radio.org



500 kHz EXPERIMENT KICKING INTO HIGH GEAR

The group of Amateur Radio operators researching the radio spectrum in the vicinity of 500 kHz already have recorded a few successes. The 500 KC Experimental Group for Amateur Radio is operating under Part 5 experimental license WD2XSH, which the FCC Office of Engineering and Technology granted September 13 to the ARRL. Project manager Fritz Raab, W1FR, says WD2XSH participants have been heard across both the Atlantic and the Pacific as well as all around the US.

"Things took off much faster than I had ever imagined," Raab told ARRL early this month. "Eleven stations are on the air now." Others in the 21-station group included on the Experimental license continue efforts to cobble together the transmitting and antenna systems necessary to put out a signal on what group members call "the 600 meter band."

Raab says the 600-meter signal of well-known low-frequency enthusiast "Dex" McIntyre, W4DEX, in North Carolina — operating as WD2XSH/10 — was copied October 10 in Germany using very slow-speed CW (QRSS). Other stations have since duplicated that feat. Rudy Severns, N6LF, operating as WD2XSH/20 from Oregon, not only is heard regularly throughout the western half of the US but has been copied in Hawaii and, possibly, in New Zealand, Raab says, noting that the New Zealand reception was "not sufficiently clear" to make a claim.

While not a part of the experimental group, Ralph Wallio, W0RPK, has assumed the role of official record keeper and has noted more than two dozen one-way reception reports of more than 1000 miles. The list included "by ear" CW reception from Colorado to Massachusetts, nearly 1800 miles. The best distance as of earlier this week: 4515 miles from Conrad Murray, WS4S, operating as WD2XSH/11 in Tennessee to Germany using QRSS (reception using computer software).

The two-year WD2XSH authorization permits experimentation and research between 505 and 510 kHz using narrowband modes at power levels of up to 20 W effective radiated power (ERP). The Midwest stations are limited to 505 to 508 kHz for the time being, Raab notes. The first QSO took place September 21 between the stations in Tennessee and North Carolina — a distance of some 300 miles.

To get on the air, WD2XSH participants have repurposed some older gear and even some test equipment. Paul Signorelli, W0RW, operating as WD2XSH/21 from Colorado, has modified a vintage Heath DX-100 transmitter for

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LF CW operation. "I match the DX-100 output to a 5-turn link of #10 wire," he reported in a detailed description of how he was able to get the old rig to transmit just below the AM broadcast band. Getting "down there" points up the need to increase physical component size by several orders of magnitude.

"The link is on a 13-inch diameter cardboard hoop," Signorelli continues. "It slips up and down over the antenna loading coil and is adjusted for lowest SWR." That antenna loading coil itself is a foot in diameter, wound with #10 solid, insulated wire. A 30-gallon trash can provides the weatherproofing for the coil. The DX-100 generates 100 W of RF on 500 kHz. Signorelli advises against using conventional-sized coax. "This transmitter will smoke your coax if you have high SWR," he said. He's using hardline instead.

The experimental group does invite reception reports <<http://w5jgv.com/500kcreportform.htm>> of transmissions made by group members. You do not have to be a member of the experimental team to send a reception report.

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Peace on The Earth



ARISS *cont'd from pg.3*

Awakened at 2 AM, ARISS Australian team member Tony Hutchison, VK5ZAI, put out a blind call on VHF to the ISS crew, although no answer was needed at that point. Others available to cover later passes included amateur radio operators in South Africa; Belgium; Sacred Hearts Academy in Honolulu; and the Goddard Space Flight Center's WA3NAN. Each of these Earth stations has a track record of being able to sustain reliable communication with the ISS.

The call-up marked the first time that NASA had asked for such Amateur Radio assistance since the initial crew came aboard the ISS in November 2000. Ransom says that by remaining available to ensure solid communication while Mission Control staff dealt with the docking issue, the ISS Ham Contingency Network provided Mission Control with an additional layer of security.

Once the antenna retraction problem was resolved, the contingency network stood down, but NASA's request and the ensuing ham radio activity did serve as a valuable drill, ARISS said.

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ARC Background Check Policy Clarified

The American Red Cross has recently notified their local chapters that their volunteers and staff members must submit to a criminal background check. There are some sound reasons as to why these criminal background checks were required. The Red Cross didn't want the possibility of having a person with a history of violent crime representing them while assisting disaster victims.

The list of volunteers who are being asked to submit to the background checks has been enlarged to include volunteers with other organizations who assist the Red Cross during times of disaster relief efforts, such as amateur radio operators volunteering through their local ARES unit.

ARRL President Joel Harrison, W5ZN, issued this statement recently on the Red Cross's new policy mandating background checks of its employees and volunteers: In short, we have been told that any volunteer who would be assisting the Red Cross disaster relief effort in any way would be required to complete the background check through the Red Cross's third party provider, mybackgroundcheck.com.

The ARRL recommends to anyone submitting their information to the Web site to read VERY carefully what they are giving the Red Cross permission to check. The Red Cross is requiring volunteers to grant permission for more than just a criminal background check. They are also requiring permission to draw a consumer and/or investigative consumer report on the volunteer. This would include a criminal background check, credit check and a mode of living check.

This is much more information than would be obtained in a criminal background check that the Red Cross states that they need. Additionally, information you are requested/required to give on this website is: name, address, social security information, driver's license number, date of birth and a credit card number...all good pieces of information an identity thief needs to open up accounts in your name.

The Red Cross has stated that they will not use credit reports. Requiring that volunteers authorize the procurement of a credit report is inconsistent with this assurance. We have been told that ALL volunteers that would assist the Red Cross in any fashion during disaster relief efforts other than just very short times are also required to complete background checks at this website.

The American Red Cross has attempted to clarify its policy to require background checks of its employees and volunteers, at least as far as the policy applies to possible credit

checks. In a statement to the ARRL November 9, Laura Howe, the Red Cross director of response communication and marketing, stressed that, while background check applicants must give permission to conduct a credit check, the Red Cross has no intention of conducting them across the board.

"The Red Cross realizes some volunteers may have concerns about authorizing a credit check. Those concerns are understandable," Howe said. "But please rest assured that credit checks are only run in rare instances and are not a part of the routine minimum basic check the Red Cross performs on employees or volunteers." Howe told the League that the "standard minimum check" verifies the applicant's Social Security number and a search of the National Criminal File for the past seven years.

"While the Red Cross will never run a credit check on the vast majority of its employees and volunteers," she asserted, "it is important that this standard language is included in the consent form to protect our clients, volunteers and employees."

The Statement of Understanding (SoU) between the Red Cross and the ARRL does not address the issue of background checks. It also is ambiguous on the subject of whether ARES volunteers automatically become Red Cross volunteers when supporting Red Cross operations and become subject to a background check. The bottom line: The requirement extends to whomever the Red Cross says it does. While some Red Cross chapters will allow ARES member participation without requiring that they register as Red Cross volunteers, others may not. The ARRL-Red Cross SoU is up for review in 2007.

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A Different Christmas Poem

LCDR Jeff Giles, SC, USN
Al Taqqadum, Iraq

The embers glowed softly, and in their dim light,
I gazed round the room and I cherished the sight.
My wife was asleep, her head on my chest,
My daughter beside me, angelic in rest.

Outside the snow fell, a blanket of white,
Transforming the yard to a winter delight.
The sparkling lights in the tree I believe,
Completed the magic that was Christmas Eve.

My eyelids were heavy, my breathing was deep,
Secure and surrounded by love I would sleep.
In perfect contentment, or so it would seem,
So I slumbered, perhaps I started to dream.

The sound wasn't loud, and it wasn't too near,
But I opened my eyes when it tickled my ear.
Perhaps just a cough, I didn't quite know,
Then the sure sound of footsteps outside in the snow.

My soul gave a tremble, I struggled to hear,
And I crept to the door just to see who was near.
Standing out in the cold and the dark of the night,
A lone figure stood, his face weary and tight.

A soldier, I puzzled, some twenty years old,
Perhaps a Marine, huddled here in the cold.
Alone in the dark, he looked up and smiled,
Standing watch over me, and my wife and my child.

"What are you doing?" I asked without fear,
"Come in this moment, it's freezing out here!
Put down your pack, brush the snow from your sleeve,
You should be at home on a cold Christmas Eve!"

For barely a moment I saw his eyes shift,
Away from the cold and the snow blown in drifts..
To the window that danced with a warm fire's light
Then he sighed and he said "Its really all right,

I'm out here by choice.
I'm here every night."

"It's my duty to stand at the front of the line,
That separates you from the darkest of times.

No one had to ask or beg or
implore me,
I'm proud to stand here like my
fathers before me.

My Gramps died at ' Pearl on a day in December,"
Then he sighed, "That's a Christmas 'Gram always remem-
bers."

My dad stood his watch in the jungles of ' Nam ',
And now it is my turn and so, here I am.
I've not seen my own son in more than a while,
But my wife sends me pictures, he's sure got her smile.

Then he bent and he carefully pulled from his bag,
The red, white, and blue... An American flag.
I can live through the cold and the being alone,
Away from my family, my house and my home.

I can stand at my post through the rain and the sleet,
I can sleep in a foxhole with little to eat.
I can carry the weight of killing another,
Or lay down my life with my sister and brother..

Who stand at the front against any and all,
To ensure for all time that this flag will not fall."
"So go back inside," he said, "harbor no fright,
Your family is waiting and I'll be all right."

"But isn't there something I can do, at the least,
"Give you money," I asked, "or prepare you a feast?
It seems all too little for all that you've done,
For being away from your wife and your son."

Then his eye welled a tear that held no regret,
"Just tell us you love us, and never forget.
To fight for our rights back at home while we're
gone,
To stand your own watch, no matter how long.

For when we come home, either standing or dead,
To know you remember we fought and we bled.
Is payment enough, and with that we will trust,
That we mattered to you as you mattered to us."





Old-time Lincrew Lingo The Clumsum at work

Today, electricity is available at the flip of a switch. This convenience wasn't always the case, especially for folks living in the country during the late 1930s. Distributing electricity in those days was a very labor intensive operation. A couple of retired linemen recount the process of installing a transformer and service drop to a rural farm home. The crew consists of a clum-some (or clumsum, line-man), grunt (groundman) and skinner (driver).



Their transportation to the job site is a Jimmy (GMC pickup).

If you use your imagination, you can figure out what the crew is doing even if their lingo sounds foreign.

Upon reaching the job site, the skinner got the nose bag off the truck, which contained the whiskey-getters (tools) of the clum-some. Very tenderly, the clum-some laid out the whiskey-getters. When it came to his agony irons, he was careful to put on the left one first because he was superstitious.

Being completely saddled up, he hit the stick and sneaked his way toward the top. (Once there), he slipped a leg around the stick and, as if by magic, his scare strap was around the stick and snapped to his D-ring. As he settled back into the saddle, he pulled his pry bar and persuader out of his holster. After driving the pry bar into the stick, he attached the grunt line.

With this done, he looked around and yelled, "Send up two snakes and a hood." With his rubbers in place, he reached for the gut bag and removed an eel (jumper wire). With the snakes and hood installed, he was ready for work.

Taking out his cheater stick, he made his marks with a skinning knife, then yelled, "Send up the sawdust pump so I can ventilate this stick." With the support bolt in place,

cont'd col. 2

he drew a hard head from his catchall and used a pole beater to install it on the stick.

Putting a choker in place and hanging a set of falls, (the crew) was ready to suck the falls to the ground and hook the can. With the grunt on the business end of the falls and the skinner on the tag, the can went up and slid smoothly into position.

As the can rested on the hanger bolt, the clum-some got out his knuckle buster and secured it to the stick. After removing the falls, tag and choker, he pulled the sag and dead-ended to the clevis spool. Bringing the secondary tails from the can, he attached the ground to the system neutral. With squeeze-ons and an 0-51, he made the secondary connections.

Removing the snakes and hood from the primary and placing the tap clamp on the stringer, he grabbed the eye of the tap clamp in the shotgun and made the hot tap.

With the bee humming and lights at the end of the drop, the woodwalker took several quick steps and was on the ground. Removing his whiskey-getters and placing them in his tool bag, he was heard to exclaim: "Another one in the sky!"

BREAK - OVER

Quick Training Tips Phonetic Alphabet

Accuracy and speed are the goals in emergency communications. Using a commonly understood language is essential to our goal. Learn and practice the ITU phonetic alphabet.

BREAK - OVER



ARES Breakfast
Saturday December 9th
7:30AM
Perkins Restaurant
Savage, MN

NECOS Schedule - December 2006

4 Dec	AB0YQ Steve
11 Dec	K0KTW Pat
18 Dec	N0PI Dan
25 Dec	No Net
1 Jan	No Net
8 Jan	W0NFE Bob
15 Jan	KB0FH Bob