



ARES *Happy New Year!*

COMMUNICATOR

Information for Scott County Amateurs



January, 2008

Accurate, Reliable Emergency Communications

Volume 8, Number 1

Red Cross Highlights Ham Operators

PORTLAND, OR Dec 13,2007. Hard hitting disasters like the recent Northwest storms can knock communications for a loop. In Oregon, thousands of homes and businesses were left “power-less” – without utilities, telephones or any lines of communication to outside help.

Luckily, local residents in storm ravaged areas could depend on a handful of specially trained volunteers dedicated to an old-fashioned method of information sharing – ham radio.

Anticipating that telephone lines, cell towers and Internet connections in rural communities could be severely impaired, the Red Cross – in collaboration with CERT and other partners – pre-positioned ham radio operators and relied on them to deal with the multitude of storm-related crises.

Amateur radio equipment can be used in disaster areas even when power is out and phone lines, relays and other communications systems are down because these radios run on their own battery or generator power.

On the evening of Sunday, Dec. 2, alarming weather reports prompted Red Cross volunteer Scott Oerding to pack up his portable ham radio and overnight gear, and head to Tillamook to wait out the storm.

A Portland resident of nearly 30 years and a seasoned volunteer with the Oregon Trail Chapter of the American Red Cross, Scott met up with his crew of eight volunteer ham radio operators to determine where along the storm path they should locate operations in hopes of keeping the emergency dialog going.

Though labeled an “amateur,” Scott would end up relaying dozens of routine emergency calls to the Emergency Operations Center (EOC) for Tillamook County like a real pro.

Red Cross *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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Gen. Edward W. Waldon Scholarships

\$200,000 to be awarded by Jan.14, 2008

(Editor Note: Please pass this info to any Mn. soldier intending to attend school.)

The Masonic Grand Lodge of Minnesota is pleased to announce the availability of two hundred (200) \$1,000 scholarship awards and grants available to all members of the Minnesota National Guard and Reserve Units who have served in the combat zones since 9/11/2001.

These awards may be used to pay tuition or they can be applied towards the cost of the Montgomery GI Bill expense. The awards are not based on grades or past results as a student and will be for \$1000 for each recipient.

These awards are being offered to members of the Minnesota National Guard and various Reserve units serving in the combat zones in honor of their service to our country.

The Major General Edward W. Waldon Scholarship is named in honor of Past Grand Master and retired Major General Edward W. Waldon, who once commanded the Minnesota National Guards 47th “Viking” Infantry Division. Ed served as Grand Master of Masons in Minnesota in 1992. Edward Waldon passed away in 2003.

Scholarships *cont'd on page 2*

ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)
Breakfast Saturday, January 12th

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
Bloomington	147.090+	9:00pm	Sunday
Neighboring Nets			
North Dakota	3.937Mhz	6:30pm	Daily
South Dakota	3.870Mhz	6:00pm	Daily
Wisconsin	3.985Mhz	5:30pm	Daily

Scholarships *cont'd from pg. 1*

The mission of all Masons is to engage and inspire men of good character, and to be guided by the enduring and relevant tenets of the Masonic fraternity. Masonic core values include Freedom and Masons champion the liberties and values outlined in the founding documents of the United States of America.

If you know of soldiers who might qualify for one of these awards, you are encouraged to ask them to visit the Grand Lodge website, www.mn-masons.org. select 'Masonic Charities' from the menu on the left, then select 'Scholarship Program' to download the simple award application form.

The application must be completed and mailed with a copy of your DD214 by regular mail by January 14, 2008. If more than 200 applications for the awards are received, a drawing will be held on January 15, 2008 to choose the award recipients. No Masonic affiliation is required to apply for the award; service in the combat zones since 9/11/2001 is the only prerequisite to apply for this award.

BREAK - OVER

"Things may come to those who wait, but only the things left by those who hustle."

Abraham Lincoln

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Red Cross - *cont'd from page 1*

Two cold, muddy, rain-soaked days into the operation, Scott's skills were put to the test. Taking advantage of a break in the clouds, Scott headed to the shelter's parking lot for a breath of fresh air and a brief moment of peace. As he walked toward his vehicle, a mud-spattered pick-up tore into the driveway.

"I stood watching, listening as the driver – a frantic woman in her fifties – stumbled out and began rambling about someone hurt and in need of help," Scott explained. "She looked panicked and exhausted."

The woman went on to tell Scott about her injured neighbor. "My first instinct was to calm her down a bit and attempt to get as many details as possible before determining how to proceed," he continued. By Scott's account, the woman grew nervous and frustrated as she struggled to articulate just what had happened and who needed the medical help.

He managed to figure out that an elderly man – the husband of the woman's close acquaintance – had suffered a bad fall and required immediate medical attention. His condition was deteriorating rapidly.

Scott reached for his hand-held radio, speaking into the mouthpiece with clear and concise bursts:

"Emergency traffic for 9-1-1."

After multiple relay attempts and no response from the EOC, another ham operator answered the distress call.

"I have a functional landline and can handle your traffic," said the voice on the other end. Scott then delivered the essential information intended for the paramedics, easing the woman's fears as she heard that professional medical help was on the way.

Less than fifteen minutes passed before the ambulance raced past the shelter en route to the home of the injured man. Once on the scene, the EMTs trudged through mud and debris in the flooded home to stabilize the elderly gentleman before transporting him to a nearby medical facility.

Over the airwaves, word reached Scott that the man had shattered his hip and did indeed require the immediate medical attention Scott was able to summon.

"I let out a big sigh of relief knowing that we were able to get him the help he needed," said Scott. "Without these ham radios, I don't know how else this man would have been saved."

BREAK - OVER

Happy New Year!



Quick Training Tips

ITU Phonetics

THIS IS KICKER-SIX-KENYA-SISTER-ROBERT NAME IS
JOHN HOW COPY, OLD MAN?
OKAY JAN, BUT MISSED YOUR CALL SIGN. PLEASE
REPEAT.
ROGER THAT'S KING-SIX-KILIMANJARO-SALEM-
ROCHESTER, YOU ROGER THAT?
OKAY-I GOT YOU IN SALEM, NEAR ROCHESTER
GIMMIE THAT CALL ONCE MORE.
AWRIGHT, OLD MAN, IT'S KILO-SIX-KILO-SIERRA-
ROMEO.
GOT IT THAT TIME-K-6-K-S-R. YOU'RE FIVE-BY-NINE
HERE YOUR NAME JOHN OR JAN?"

The irony here? The guy was 5-by-9, on a clear frequency, and still couldn't be understood!

Did she say Tracy or Stacy? Was he located in Kokomo or Pocono? Is she raising her power or her tower? Ever been confused by similar sounding words like these? Of course you have! The good news: The confusion can be eliminated and clarity enhanced through the use of phonetic spelling-but only if both parties use the same phonetic alphabet.

Can we Talk? Of course. Whether we use FM, sideband or AM, we do it all the time – some of us do it incessantly, without even thinking. But can we lx' assured that we're understood? Well, that's another matter entirely – and it's the main reason we should get in the habit of using a generally accepted phonetic alphabet whenever we're using our voice to communicate.

What's a phonetic alphabet anyway? It's a system of using word-sounds to define each letter, instead of just saying the letter itself. While the science of phonetics is fraught with complexities far beyond the scope of this article, here's the crux of it: When voice communications are hampered by poor hand conditions, interference from other stations, weak signals or bad audio, sounding out the word that's been assigned to each letter can enhance clarity and accuracy for the receiving station.

Take a look at some of the letters and numbers that have similar sounds: BCD E G PTV...A K J...M N...Q U ...F S ... FIVE. NINE. Then there are the words like RE-PEATER and METER; MIC and SPIKE, and any number of other combinations of "like-sounding" words. It's easy to see how just saying the word could lead to misunderstanding.

Now stir into this complication adverse hand conditions, and you have all the makings for a boatload of problems. Or, as chain-gang warden Strother Martin tells prisoner Paul Newman in the film "Cool Hand Luke": *What we've got here...is failure to communicate.*

There's a wide variety of phonetic alphabets, used by various nations, governments, bureaus and departments. And since there are no domestic laws governing the use of specific phonetics in radio communications, you're free to toss about any ridiculous word combos you'd like. Your communications may fail but at least you won't get arrested for it. We're going to concern ourselves with the most recognized and widely used phonetic alphabet – That adopted by NATO and the International Telecommunications Union (ITU) back in 1956. It's been accepted as the world standard by the Federal Aviation Administration, the International Civil Aviation Organization, the US military—and the ARRL.

Why all the fuss about using standardized words, anyway? Isn't the word Italy or Image as good as India? Phonetics experts say that even though those three words have the short "I" sound, research shows that the ITU alphabet is better understood by a wider variety of operators, foreign and domestic. Some would argue that parts of the standard phonetic alphabet, such as Romeo, Sierra, Yankee, and Juliet don't have the punch to come across effectively especially to those who speak languages other than English. Is there a better choice? Some believe Radio, Sugar, Yokohama, Japan, Zanzibar, and America - part of what can be called the DXers' phonetic alphabet - are stronger than Romeo, Sierra, Yankee, Juliet, Zebra, and Alfa. You'll get an argument no matter which side you choose. The only sure thing is that both ends of the QSO must use the same phonetic alphabet.

Imagine being neck deep in net operations and emergency communications during a catastrophe and amid all the clamor and agony of that earthquake, tornado or hurricane you're trying to understand one op who insists on using his own brand of phonetics, and another who uses the ITU standard half the time and whatever pops into his head the other half. Clever and humorous word substitutions may have their place, but it's clear that they can lead to miscommunication, particularly in net or emergency situations.

A few tips are in order. Try to speak slowly and distinctly as you say the appropriate words. Check your transmitter's mic gain for any over modulation. Experienced ops will tell you that pronunciation should carry a slight emphasis on a syllable but should be accent-free. A few examples of good pronunciation: KEY-loh see-AIR-rah ROW-me-oh

Knowing when not to use phonetics is nearly as important as knowing when to apply them. You've likely heard the monotonous tones of the operator who feels the need to

ITU Phonetics *cont'd pg.3*

spell each and every word phonetically...NAME IS BILL-BRAVO INDIA LIMA LIMA .. LOCATED OVER HERE IN DALLAS, THAT'S DELTA ALFA ...

If you're given a 59 signal report by the receiving station, forget the phonetics - unless you're forwarding some unusual or potentially ambiguous words, or the receiving station asks for fills.

The whole idea of phonetics is to help us become better communicators, cut confusion and enhance understanding whether we're operating a contest, chasing DX, running a net or handling emergency traffic. When you need to use a phonetic alphabet, memorize and use the ITU phonetic alphabet. Oscar Kilo? OK

ITU Phonetic Alphabet

A-ALFA (AL-fall)
B-BRAVO (BRAH-voh)
C-CHARLIE (CHAR-lee)
D-DELTA (DELL-tall)
E-ECHO (ECK-ob)
F-FOXTROT (FOKS-trot)
G-GOLF (GOLF)
H-HOTEL (hoh- TELL)
I-INDIA (IN-dee-all)
J-JULIET (JEW-lee-ETT)
K-KILO (KEY-Ioh)
L-LIMA (LEE-mall)
M-MIKE (MIKE)
N-NOVEMBER (no-VEM-ber)
O-OSCAR (OSS-cah)
P-PAPA (pall-PAH)
Q-QUEBEC (keh-BECK)
R-ROMEO (ROW-me-oll)
S-SIERRA (see-AIR-rall)
T -TANGO (T ANG-GO)
U-UNIFORM (YOU-nee-form)
V-VICTOR (VIK-tah)
W-WHISKEY (WISS-key)
X-XRAY (ECKS-ray)
Y-YANKEE (YANG-key)
Z-ZULU (ZOO-loa)

BREAK - OVER



Test Your ICS Knowledge

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.

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

- A. Base
- B. Camp
- C. Incident Command Post
- D. Staging Area

Check-in officially logs you in at the incident. The check-in process and information help to:

- Ensure personnel accountability.
 - Track resources.
 - Prepare personnel for assignments and reassignments.
 - Organize the demobilization process .
 - _____
- A. Determine procedures for reimbursing your headquarters.
 - B. Identify purchasing authority and procedures.
 - C. Determine how food and lodging will be provided.
 - D. Locate personnel in case of an emergency.



Answers for the December ICS Quiz

Which of the following would you expect to see in an Incident Action Plan?

B. Listing of all staff members currently deployed to the incident.

Which incident facility is the location where personnel and equipment are kept while waiting for tactical assignments?

D. Staging Area

Which General Staff position manages costs related to the incident, and provides accounting, procurement, time recording, and cost analyses?

A. Finance/Administration Section Chief

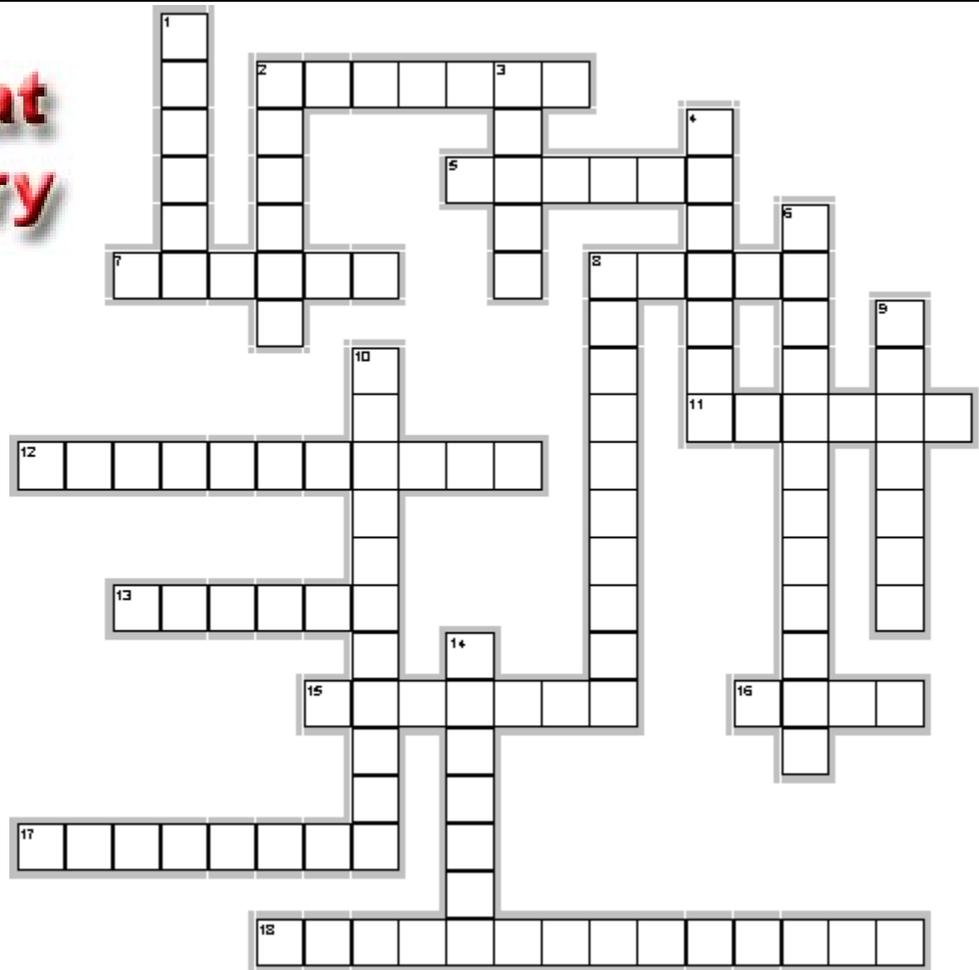
Name That DX Country

Across

- 2. CP
- 5. HP
- 7. XE
- 8. EA
- 11. SA
- 12. DU
- 13. SA
- 15. 7X
- 16. OA
- 17. GM
- 18. H4

Down

- 1. F
- 2. PY
- 3. I
- 4. C6
- 6. KA
- 8. HL
- 9. EI
- 10. HB
- 14. ON



Operating Events

January 2008

- 1 New Year's Day
ARRL Straight Key Night
- 5 Quadrantids Meteor Shower
ARRL RTTY Roundup
- 6 Kid's Day
- 7 Millard Fillmore's Birthday (1800)
- 12 North American QSO Party—CW
- 19 ARRL January VHF Sweepstakes
- 19 North American QSO Party—Phone
- 20 ARRL January VHF Sweepstakes
- 20 North American QSO Party—Phone
- 26 CQ WW 160-Meter Contest



Naval Rescue

PERSIAN GULF (Dec. 23, 2007) A Navy Search and Rescue swimmer descends from an MH-60S Seahawk helicopter, assigned to the "Sea Knights" of Helicopter Sea Combat Squadron (HSC) 22 embarked aboard the fast combat support ship USNS Arctic (T-AOE 8) to retrieve survivors from a life raft at sea. The shipwrecked survivors were escorted aboard the Nimitz-class nuclear-powered aircraft carrier USS Harry S. Truman (CVN 75) for medical treatment. The seven mariners were recovered after their dhow sank in rough seas. U. S. Navy photo by Chief Operation Specialist Nicholas A. Anzelino

December Crossword Solution

Digital Modes

Across

1. RTTY—A very simple technique which uses a five-bit code to represent all the letters of the alphabet, the numbers, some punctuation and some control characters.
3. MFSKSIXTEEN—An advancement to another mode and encodes 16 tones. Uses Fast Fourier Transform technology to decode the ASCII characters, and Constant Phase Frequency Shift Keying to send the coded signal. Continuous Forward Error Correction (FEC) sends all data twice with an interleaving technique to reduce errors from impulse noise and static crashes. A new improved Varicode is used to increase the efficiency of sending extended ASCII characters.
4. THROB—Another new DSP sound card mode that attempts to use Fast Fourier Transform technology. Is based on tone pairs with several characters represented by single tones. It is defined as a “2 of 8 +1 tone” system, or more simply put, it is based on the decode of tone pairs from a palette of 9 tones.
7. PACTOR—An FSK mode and is a standard on modern Multi-Mode TNCs. It is designed with a combination of packet and AMTOR Techniques.
8. GTOR—An FSK mode with a fast transfer rate compared to Pactor. Uses a data inter-leaving system that assists in minimizing the effects of atmospheric noise and has the ability to fix garbled data. Attempts all transmissions at 300 baud but drops to 200 baud if difficulties are encountered and finally to 100 baud.
9. HF PACKET—A FSK mode that is an adaptation of a very popular radio code used on VHF (1200 baud) FM amateur radio. Recently enjoyed a resurgence in popularity since it is the protocol used by APRS - Automatic Position Reporting System.
12. HELLSCHREIBER—A method of sending and receiving text using facsimile technology. This mode has been around along time. It was actually developed by Germany prior to World War II.

Down

2. TELEPRINTINGOVERRADIO—Traditionally used to describe the three popular “error free” communication modes. The main method for error correction is from a technique called ARQ.
5. MTSIXTYTHREE—New DSP based mode for sending keyboard text over paths that experience fading and interference from other signals. It is accomplished by a complex scheme to encode text in a matrix of 64 tones over time and frequency.

THE RADIO AMATEUR'S CODE

By Paul M. Segal W9EEA (1928)

The Radio Amateur is:

CONSIDERATE... never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL... offers loyalty, encouragement and support to other amateurs, local clubs and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE... with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY... slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED... radio is an avocation, never interfering with duties owed to family, job, school, or community.

PATRIOTIC... station and skill always ready for service to country and community.

6. PSKTHIRTYONE—A simple variable length text code with a narrow bandwidth phase-shift keying signal using DSP techniques. This mode is designed for “real time” keyboard operation and at a 31 baud rate is only fast enough to keep up with the typical amateur typist.
10. CLOVER—A PSK mode which provides a full duplex simulation. It is well suited for HF operation. Has good band-width efficiency with high error-corrected data rates. Adapts to conditions by constantly monitoring the received signal.
11. AMTOR—An FSK mode, has 5 bits and can not transfer extended ASCII or any binary data.

East – West Shrine Game

Saturday, Jan. 29, 2008

The 83rd annual East-West Shrine Game is scheduled for Saturday, Jan. 19, 2008, at University of Houston's John O'Quinn Field at Robertson

Stadium. Kick-off is at 6 p.m. CST and the game will be nationally broadcast by ESPN2.



The competition pits all-star senior athletes who attend college in Eastern North America against those attending college in Western North America. The game and its preceding practice sessions attract dozens of scouts from professional football teams.

For the athletes, participation in the East-West Shrine Game is more than a few hours of football. The Sunday preceding the game, players will be shuttled to Shriners Hospitals for Children - Houston to tour the facility, visit patients and experience the Shriners Hospitals mission. "It was such an incredible experience to see the interaction between players and patients this year, and I know next year will be equally amazing," said Ralph Semb, Chairman of the Board of Trustees for Shriners Hospitals. "When the players get to witness first-hand who and what they are working for, it makes the entire effort more meaningful." Former National Football League head coaches Dick Vermeil and Mike White will serve as coaches for the two teams in this year's game.

Vermeil is one of the most distinguished head coaches in the history of both professional and college football. He spent 19 seasons as a head coach in the NFL and two years at UCLA, and is the only head coach to lead teams to victories in both the Super Bowl and the Rose Bowl.

A two-time National Coach of the Year (1975 and 1983), White has served as head coach at the University of California, the University of Illinois and the NFL's Oakland Raiders.

The East-West Shrine Game raises awareness and exposure for the specialized pediatric care available - at no charge - to children under the age of 18 at the 22 Shriners Hospitals for Children in the U.S., Canada and Mexico. Since 1924, the game has informed millions of people about the Shriners Hospitals mission and raised more than \$15 million for the organization.



Shriners Hospitals
for Children™

DX News

New Prefix for Bosnia-Herzegovina

In response to a request from the Ministry of Communications and Transport of Bosnia and Herzegovina in August, the International Telecommunication Union (ITU) withdrew the call sign prefix allocation T9A-T9Z for Bosnia and Herzegovina and made a new allocation, E7A-E7Z. The change was made initially on a provisional basis under authority of the ITU Secretary-General and was confirmed by the 2007 World Radiocommunication Conference to be effective November 17, 2007.

Amateur Radio station licenses bearing E7 prefixes will be issued beginning in January 2008, and the use of other prefixes will be phased out.

DXCC Desk Announces New Entity

The ARRL DXCC Desk is pleased to announce the addition of St Barthelemy (FJ) to the DXCC List, making the island entity number 338 with an effective date of December 14, 2007. Cards with contacts dated December 14, 2007 or after will be accepted for DXCC credit. New card submissions for St Barthelemy will not be accepted until January 1, 2008 in order to allow time for administrative adjustments.

French St Martin (FS), while also added to the List of Dependencies and Areas of Special Sovereignty, will remain on the DXCC List, but it is now considered a Point 1 Political Entity under the same classification as that of St Barthelemy.

BREAK - OVER



ARES Breakfast

Saturday January 12th
7:30AM
Perkins Restaurant
Savage, MN

NECOS Schedule - January 2008

7 Jan	WONFE Bob
14 Jan	KB0FH Bob
21 Jan	Open
28 Jan	N0PI Dan
4 Feb	WONFE Bob
11 Feb	KB0FH Bob