



ARES COMMUNICATOR

Information for Scott County Amateurs



July, 2007

Accurate, Reliable Emergency Communications

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BPL Interference Potential to be Investigated

Sen Mark Pryor of Arkansas filed a bill in early June in the US Senate calling on the Federal Communications Commission to conduct a study on the interference caused by broadband Internet transmission over power lines, otherwise known as BPL. Sen Pryor is a member of the Senate's Committee on Commerce, Science, and Transportation.

If passed, Senate Bill 1629 would require the FCC to "conduct and submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives, a report on a study of interference potential of systems for the transmission of broadband Internet services over power lines."

The bill states that there are to be four required areas of study.

1. "The variation of field strength of BPL service signals with distance from overhead power lines, and a technical justification for the use of any particular distance extrapolation factor.
2. "The depth of adaptive, or 'notch,' filtering for attenuating normally permitted BPL service radiated emission levels that would be necessary and sufficient to protect the reliability of mobile radio communications.
3. "A technical justification for the permitted, radiated emission levels of BPL signals relative to ambient levels of man-made noise from other sources.
4. "Options for new or improved rules related to the transmission of BPL service that, if implemented, may prevent harmful interference to public safety and other radio communication systems."

ARRL president Joel Harrison, W5ZN, said, "The ARRL is grateful for Senator Pryor's support. The radio amateurs
BPL cont'd col. 2

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: NOBHC@aol.com
 Phone: Home 952-894-5178 Portable 612-280-9328
 Reader submissions encouraged!

Field Day Fun 2007

The weekend of June 23rd – 24th marked the 75th annual ARRL Field Day exercise. Scott County ARES members erected their portable operation in the Canterbury City Park in Savage, MN. The weather was great, the bugs minimal, the company pleasant, the Saturday evening pot luck yummy, and radio propagation was horrible.



Operation concentrated on 80M to 15M along with VHF and UHF. Several visitors stopped by the site including Frank Karnauskas, N1UW, MN Section Emergency Coordinator, and Andrew Miller, reporter for Thisweek Savage and several curious park users. Andrew Miler's article appeared in the June 30th issue of Thisweek Savage.

Check out the photos of the weekend starting on page four.

ARES Activities

**Weekly Net Monday 7 PM 146.535 mhz (s)
Breakfast Saturday, July 14th**

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

BPL Investigaton *cont'd from pg.1*

of my home state of Arkansas are fortunate to be represented in both the Senate and the House of Representatives by legislators who are sensitive to our needs and concerns. The Senator's recognition of Amateur Radio's role in emergency communications and public safety is greatly appreciated."

This bill calls for the same studies to be performed as House Bill 462, introduced January 12, 2007 by Rep Mike Ross of Arkansas. From ARRL Letter June 15,2007.

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Scott County ARES Contacts

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

Asst. Emergency Coordinator
Bob Minor WONFE
5210 West 141st Street
Savage, MN 55378
952-894-2657
WONFE@arrl.net

Asst Emergency Coordinator
Daniel Vande Vusse NOPI
5722 West 141st Street
Savage, MN 55378
952-440-1878
NOPI@arrl.net



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 you knowledge of the ICS.

Depending upon the size and type of incident or event, it may be necessary for the Incident Commander to designate personnel to provide public information, safety, and liaison services for the entire organization. In ICS, these personnel make up the:

- A. Deputy Staff.
- B. Director Staff.
- C. Command Staff.
- D. General Staff.

Every incident must have a verbal or written Incident Action Plan. The purpose of this plan is to provide all incident supervisory personnel with direction for:

- A. Taking actions based on the objectives identified in the plan during the operational period.
- B. Maintaining documentation and tracking resources assigned to the incident.
- C. Monitoring the number of resources that report to anyone supervisor.
- D. Obtaining and maintaining essential personnel, equipment, and supplies.

Check next month's ARES Communicator for the solution

Answers for the June ICS Quiz

Which position is the only one that is always staffed in ICS applications?

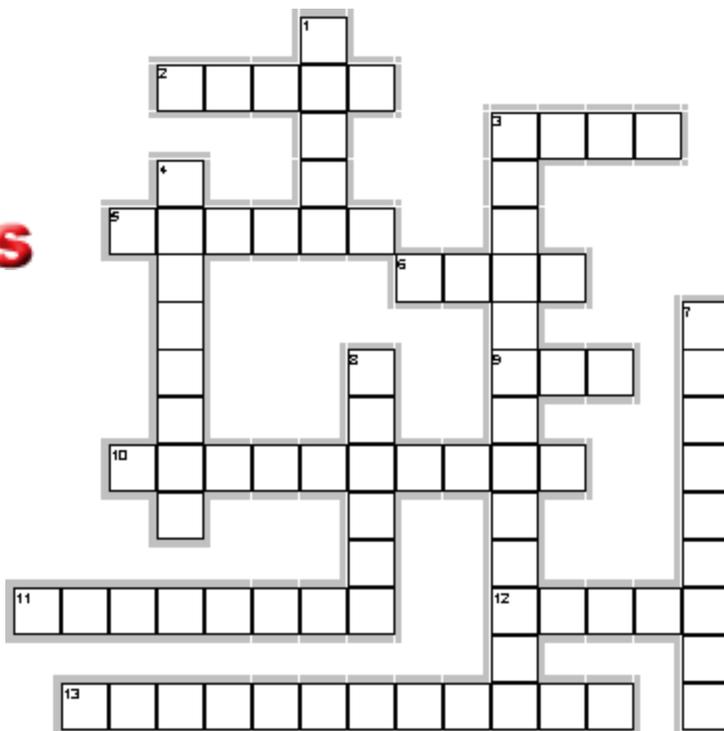
- B. Incident Commander

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.

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More Technician License Basics



Across

2. Radio waves travel at the speed of _____?
3. Communications mode utilizing automated position reporting.
5. Used to reduce spurious emissions.
6. _____ locator is a four digit designator assigned to a geographic location.
9. The government agency that grants your amateur radio license?
10. You must identify your transmission with your FCC callsign every _____?
11. Interference caused by very strong signals from a nearby source.
12. The group that coordinates the building and or launch of the largest number of amateur radio satellites.
13. This might reduce the effect of ignition noise on a received signal.

Down

1. Voice transmissions by radio.
3. _____ is caused by placing the microphone and speaker too close to each other.

4. _____ band includes the frequency 52.525 MHz.
7. Used to measure electromotive force between two points such as the poles of a battery.
8. A series of repeaters that can be connected together to provide users with wider coverage.



June Crossword Solution - Technician License Basics

Across

1. CONTROL—Operator responsible for transmissions from an amateur station.
4. GROUND—Connected to the green wire in a three-wire electrical plug.
6. WATTS—Units of electrical power.
9. WAVELENGTH—Property of a radio wave often used to identify different bands.
11. AMMETER—Used to measure current in an electrical circuit.
12. VERTICAL—_____ antenna consists of a single element mounted perpendicular to the earth's surface.
13. SOUND CARD—Used to connect a computer with a radio for data transmission.

Down

2. OHMSLAW— $E = I \times R$
3. TRANSMITTER—Converts sounds from our voice into radio signals.
5. RECEIVER—Used to convert radio signals into sounds we can hear.
7. BATTERIES—Extra _____ are a good thing to have when operating a hand-held away from home.
8. MILLIWATTS—_____ per square centimeter is the measure for RF exposure.
10. TWOMETER—_____ band including 146.52 MHz.

Field Day '07 Picture Gallery



The Field Day operation was headquartered in the picnic shelter at the Canterbury City Park in Savage. The hockey rink, seen to the right of the shelter, was a great place to erect the antennas away from the public.

Photo by KC0TZN

Larry, K0LEJ, and Dan, N0PI, erect the thirty foot mast that served as the center support for the multi-band dipole. Photo by KC0TZN



Bob, W0NFE, and Larry, K0LEJ, work on the 2M beam. Photo by KC0TZN



The Buddipole antenna was used to copy the W1AW PSK31 Field Day bulletin on Sunday morning. Photo by K0LEJ



Dan, N0PI, preparing the tilt-up VHF/UHF array (left). Operating the array with the "Armstrong Rotor" to snare that contact from Iowa (below). Photo by KC0TZN



Frank Karnauskas, N1UW, MN Section Emergency Coordinator (standing right), paid close attention to operators Larry, K0LEJ, and Bob, W0NFE, under the supervision of Jeff, AC0DH (standing). Photo by KC0TZN

There was good selection of information available to visitors who stopped by the Field Day event. Photo by K0LEJ





Andrew Miller, edotor for Thisweek Savage newspaper interviews Dan, N0PI, and Jeff, AC0DH for his story in the June 30th edition of the paper (left).

Photo by KC0TZN

Andrew frames his shot of operators Larry, K0LEJ, and Dan, N0PI, for publication along with his story on the field Day operation (below). Photo by KC0TZN



We'll supply the HEAT, You bring the MEAT for the Saturday evening potluck! Photo by KC0TZN



L to R, Dan, N0PI (back to camera), Bob W0NFE, and Bob, KBOFH, discuss the fine points of the Saturday evening potluck dinner. Photo by KC0TZN



(l to r) Bob, W0NFE, and Jeff, AC0DH, search for new ones on Saturday afternoon. Photo by K0LEJ



(l to r) Chris, KC0TZN, and Dan, N0PI, scour the bands on the second station looking for new contacts. Photo by K0LEJ



(l to r) Larry, K0LEJ, is ready to pounce on a new one as Bob, W0NFE, logs the contact. Photo by KC0TZN



(l to r) Bob, KB0FH, scans the bands while Bob, W0NFE, is ready to log a new one. Photo by K0LEJ

Quick Training Tips

Operation During Emergencies and Disasters

Point-to-point services for direct delivery of emergency and priority traffic do not involve relays. Indeed, the full ARRL format is often not needed to record written traffic. Shortened forms should be used to save time and effort. For example, the call sign of the originating station usually identifies the place of origin. Also, the addressee is usually known and close by at the receiving station, so full address and telephone number are often superfluous. In many cases, message blanks can be designed so that only key words, letters or numbers have to be filled in and communicated. In some cases, the message form also serves as a log of the operation. Not a net goes by that you don't hear an ARL Fifty or an ARL Sixty One. Unfortunately, "greetings by Amateur Radio" does not apply well during disaster situations. You may hear an ARL text being used for health and welfare traffic, but rarely during or after the actual disaster. Currently, no ARL text describes the wind speed and barometric pressure of a hurricane, medical terminology in a mass casualty incident or potassium iodide in a nuclear power plant drill. While no one is suggesting that an ARL text be developed for each and every situation, there is no reason why amateurs can't work with the local emergency management organizations and assist them with more efficient communications.

Amateurs are often trained and skilled communicators. The emergency management community recognizes these two key words when talking about the Amateur Radio Service. Amateurs must use their skills to help the agencies provide the information that needs to be passed, while at the same time showing their talents as trained communicators who know how to pass information quickly and efficiently. We are expected to pass the information accurately, even if we do not understand the terminology.

Traffic handlers and ARES members are resourceful individuals. Some have developed other forms or charts for passing information. Some hams involved with the SKYWARN program, for instance, go down a list and fill in the blanks, while others use grid squares to define a region. Regardless of the agency that we are working with, we must use our traffic-handling skills to the utmost advantage. Sure, ARL messages are beneficial when we are passing health and welfare traffic. But are they ready to be implemented in times of need in your community? The traffic handler, working through the local ARES organizations, must develop a working relationship with those

organizations who handle health and welfare inquiries. Prior planning and personal contact are the keys to allowing an existing National Traffic System to be put to its best use. If we don't interface with the agencies we serve, the resources of the Amateur Radio Service will go untapped.

Regardless of the format used, the appropriate procedures cannot be picked up solely by reading or studying. There is no substitute for actual practice. Your emergency net should practice regularly—much more often than it operates in a real or simulated emergency. Avoid complacency, the feeling that you will know how to operate when the time comes. You won't, unless you do it frequently, with other operators whose style of operating you get to know.

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Dog Days

The Dog Days (a period of 40 days beginning July 3 and ending August 11) are named for the Dog Star, Sirius, which is visible with the rising Sun at this time of year. Ancients associated this sky picture with the hot days that coincided with it. Sirius is the brightest star in the constellation Canis Major (Greater Dog).



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ARES Breakfast

Saturday July 14th
7:30AM
Perkins Restaurant
Savage, MN

NECOS Schedule - July, 2007

2 Jul	N0PI Dan
9 Jul	WONFE Bob
16 Jul	KB0FH Bob
23 Jul	K0KTW Pat
30 Jul	N0PI Dan
6 Aug	WONFE Bob