



# ARES COMMUNICATOR

## Information for Scott County Amateurs



April, 2006

Accurate, Reliable Emergency Communications

Volume 6, Number 4

### Bio-terrorism at Mystic Lake

Sweet-sixteen promotion draws a crowd

“Mystic Lake Casino / Hotel is holding a widely publicized Final Four event in progress at the facility over the weekend. The event starts Friday evening and continues through Sunday evening. Appearances by several NBA players in various events have drawn several thousand attendees to the Casino and Hotel.

News media reports break into programming to report an emergency has occurred at the Casino / Hotel. Preliminary reports indicate perhaps several hundred people may have been injured, possibly by some type of terrorist event.

Approximately one hour later, news reports have flooded the Twin City media. Authorities state that it appears there were separate explosions at the Casino and Hotel. Approximately 100 people have been examined at the triage center. There have been thirteen victims admitted to the hospital with what appears to be respiratory problems. Additional victims are waiting transfer to other area hospitals. Officials at the scene have not ruled out bioterrorism as the cause.”

This was the scenario for a tabletop exercise conducted by Scott County ARES members during their monthly breakfast meetings in February and March. The exercise had three objectives; 1. Measure the effectiveness of the activation plan and resource net procedures. 2. Provide experience in message handling in a hectic environment. 3. Demonstrate problem solving skills during a directed net simulation.

The first session, held in February, entailed a walk through of the scenario. The various means of activation were reviewed and the function of the resource net in allocating operators to specific sites for the exercise.

The scenario assumed that St. Francis Hospital had requested ARES assistance with communications during the

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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!

### FCC Katrina Panel Told

### Radio Amateurs Part of the Solution

Addressing the FCC independent panel reviewing Hurricane Katrina’s impact on communication networks, ARRL Alabama Section Manager Greg Sarratt, W4OZK, praised Amateur Radio’s ability to get the job done. Speaking before the panel March 7 in Jackson, Mississippi, Sarratt said Amateur Radio volunteers were tremendously effective in their ability to re-establish communication links using their own gear or by building systems from scratch.

“Amateur Radio operators themselves were part of the solution, providing experienced communications operators to replace and supplement local public service communications personnel in the devastated area,” Sarratt said. The volunteer radio amateurs and their equipment proved “very effective” in supporting emergency management, the Red Cross, the Southern Baptist Convention, The Salvation Army and many other organizations, he told the panel.

For 37 days following Hurricane Katrina, Sarratt—working at an American Red Cross disaster relief staging area in Montgomery, Alabama—headed the volunteer effort to process Amateur Radio volunteers headed to the Gulf Coast to assist recovery operations. Sarratt told the FCC panel that

**Katrina cont'd pg. 2**

## ARES Activities

**Weekly Net Monday 7 PM 146.535 mhz (s)**

**Breakfast Saturday April 8th**

**Bring Your HT to Breakfast!**

### SELECTED TRAFFIC NETS

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

## Katrina cont'd from pg. 1

his operation processed and deployed more than 200 ham radio volunteers from 35 states and Canada to devastated communities in Mississippi. Volunteers set up communication facilities at kitchens, shelters, emergency operations centers, distribution centers, warehouses and various command and control centers, he said.

"In each town we set up a high frequency (HF) Amateur Radio station to communicate out of the area to Montgomery and the outside world," Sarratt explained. "We also set up a communications network connecting every Red Cross facility in a town on a local short-range radio frequency. Our network included fixed and mobile disaster vehicle stations."

Sarratt told the FCC panel that interoperability is the most important thing Amateur Radio can bring to the table in emergency and disaster communications. "Amateurs demonstrated their adaptability by communicating successfully with a multitude of amateur, commercial, public service, EMA, Salvation Army and Red Cross radio systems and personnel," he said.

"Radio amateurs bring a wealth of resources to the public service and emergency communications table," Sarratt summed up. "The ARRL and Amateur Radio will continue to prepare, train, practice and test ourselves for the next event," he told the FCC panel. "Public service is a large component of the charter of the Amateur Radio Service." He suggested installing permanent Amateur Radio stations in federal, state and local emergency operations centers as well as at selected public service, Red Cross chapters and other served agencies.

Dave Vincent, the station manager of WLOX-TV in Biloxi, Mississippi, also praised ham radio in his remarks before the FCC panel. He said WLOX was lucky to have a ham operator at its studio. Without the help of Amateur Radio, Vincent said, "it probably would have been a couple of days before we would have known whether the persons in our two bureaus had survived the storm."

He said ham radio also enabled the station to contact EOCs in the three hardest-hit coastal counties. "Without this link we would not have had any way to communicate with officials along the coast," he said.

BREAK - OVER



Happy Easter!!

## "HELLO" Campaign Promotes Amateur Radio



The ARRL's "Hello" Amateur Radio public relations campaign is underway. "This campaign will give hams the tools they need to reach out in their communities to non-hams and influence their perception of Amateur Radio," says ARRL Media and Public Relations Manager Allen Pitts, W1AGP, who conceived the campaign and is its principal Headquarters contact. The "Hello" campaign is aimed at recasting Amateur Radio in the light of the 21st century and focusing on its universal appeal. At the same time, it will mark the 100th anniversary of what many

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## Bio-terror cont'd from pg. 1

emergency. By the end of the exercise ARES communicators were assigned to; St. Francis Hospital, Mystic Lake Triage location, Personal shadow for the Emergency Medical Director, Scott County EOC, and two Net Control stations (NECOS).

The second session was a "Take Your Radio to Breakfast" event. During the meeting, at the Perkins Restaurant in Savage, the scenario was played out over two hours. Each station was responsible for proper formatting, transmission and receipt of at least two pieces of formal traffic during the exercise.

Diners at neighboring tables in the dining room glanced in our direction with strange looks when they overheard requests for additional HazMat suits, emergency supplies, EMTs, and hospital room availability!

The after action review identified several areas that need improvement. Some of the topics include, procedure for moving to an alternate frequency to pass traffic, utilizing the back-up NECOS more effectively, and the need for more practice opportunities.

The April breakfast, Saturday April 8<sup>th</sup> at 7:30 AM, will be another "Bring your HT to breakfast" session. Rumor has it that the scenario will deal with an explosion and fire in downtown Savage. The Red Cross may even be involved with a large area evacuation. Oops, any more info would ruin the fun! See you at breakfast on April 8<sup>th</sup>.

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## ARRL Ham Aid “Gear Ready to Go” Awaits Next Disaster

When another disaster on the scale of Hurricane Katrina comes along, the American Radio Relay League (ARRL) will be able to deploy “ham gear ready to go,” thanks to manufacturers’ donations of Amateur Radio gear, ARRL members’ generous monetary contributions and a federal grant.

Citing Amateur Radio’s favorable treatment in recent US House Subcommittee and White House reports on the Hurricane Katrina response, Mary Hobart, ARRL Chief Development Officer, said it’s imperative to sustain and enhance ham radio’s emergency communication capabilities for the future. “Disasters happen to be one place Amateur Radio can shine,” she pointed out. “We need to maintain a high level of readiness to do those things that are second nature to ARES members but that the public is just coming to recognize.”

Making the Go Kits available to ARES teams, Hobart says, will help to cement Amateur Radio’s position as a community resource. “We want to be able to ensure that we have the personnel and the equipment,” she said. “With a disaster of this magnitude we need to be ready.”

The ARRL Ham Aid-sponsored “Go Kits” now being assembled at League Headquarters are the third leg of a program that has already reimbursed certain out-of-pocket expenses for ham radio hurricane zone volunteers and helped restore Amateur Radio backbone infrastructure along the US Gulf Coast.

“To me, this is a first step in ramping up ARRL’s ability to support Amateur Radio volunteers in the field before the next big disaster hits,” says Hobart, K1MMH. “It won’t replace or supplant anything that’s already on the ground and working well, but it will strengthen it and add flexibility to Amateur Radio’s overall response capabilities.” The equipment and cash donations, coupled with a grant from the Corporation for National and Community Service (CNCS), will mean Amateur Radio Emergency Service (ARES) field volunteers will never go without in terms of equipment. Hobart says \$25,000 in Ham Aid funds have been set aside for the Go Kits.

The Go Kits will enable the League to loan needed equipment on a moment’s notice. Emergency Communications Specialist Harry Aberly, AB1ER, spends his days at ARRL Headquarters securely stowing various equipment complements in rugged, waterproof Pelican 1650 containers.

“The idea is that this makes it easy to ship,” explains Aberly, “and since they’re less than 50 pounds apiece,

they’ll be able to go by air if necessary.” Flooding won’t be an issue. “You can throw them in the water, and they’ll float,” he adds.

So far, Aberly says, there’s an HF Kit, a VHF/UHF Kit, a Handheld Transceiver Kit and a Support Kit—seven of each, and more on the way. He and other League staffers consulted with volunteers who’d been in the field during Hurricane Katrina to find out what gear served them best or what they wished they’d had but didn’t.

The HF Kit contains a 100-W HF transceiver, a microphone and a power supply. The VHF/UHF Kit includes a dualband mobile transceiver, power supply, headset, 10 handheld transceivers and a supply of alkaline batteries. In the Handheld Transceiver Kit are eight dualband handheld transceivers and antennas plus a stock of extra batteries.

More than two dozen members of the Amateur Radio industry and individual radio amateurs contributed equipment last year for use in the Hurricane Katrina relief effort.

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April Fools!

### Hello *cont'd from pg. 2*

historians consider the first voice radio broadcast in 1906 by Reginald Fessenden.

Based on the word “Hello,” which Pitts calls “possibly the most pleasant word in any language,” the coordinated campaign will set “a positive, upbeat tone that highlights the international capabilities of Amateur Radio,” he explained. The “Hello” Web site ([www.hello-radio.org](http://www.hello-radio.org)) is designed for non-hams to learn a little bit about Amateur Radio and to arouse more interest. The site points prospective Amateur Radio licensees to groups that have indicated they will provide a warm welcome to newcomers. The national “Hello” campaign can bring curious people into contact with ham radio groups, but it will be up to local radio amateurs to make them truly welcome, Pitts maintains.

A series of 30-second radio public service announcements (PSAs) and a broadcast-quality video for the “Hello” campaign have been developed for the awareness campaign.

“ARRL President Joel Harrison, W5ZN, was correct in stating that the Main Street of today is not the same as the Main Street of yesteryear,” Pitts says. “To reach out today, the very first requirement is that Amateur Radio operators be perceived as friendly and trustworthy. That’s a true public relations goal and the primary focus of the campaign.”

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## Severe Weather Awareness Week

April 17-21, 2006

**Tornado Drill Day**  
**Thursday April 20th**  
**1:45 PM & 6:55 PM**

### Across

2. A strong downdraft current of air from a cumulonimbus cloud, often associated with intense thunderstorms. It may produce damaging winds at the surface.
5. Rounded, smooth, sack-like protrusions hanging from the underside of a cloud (usually a thunderstorm anvil). Often accompany severe thunderstorms, but do not produce severe weather; they may accompany non-severe storms as well.
7. A low, horizontal tube-shaped cloud associated with a thunderstorm gust front. Relatively rare; they are completely detached from the thunderstorm base or other cloud features.
9. A scale of tornado intensity in which wind speeds are inferred from an analysis of wind damage.
12. Showery precipitation in the form of irregular pellets or balls of ice more than 5 mm in diameter, falling from a cumulonimbus cloud.
15. A cloud which is dependent on a larger cloud system for development and continuance. Roll clouds, shelf clouds, and wall clouds are examples.
16. Issued when a hazardous weather is occurring, is imminent, or has a very high probability of occurring. Used for conditions posing a threat to life or property.

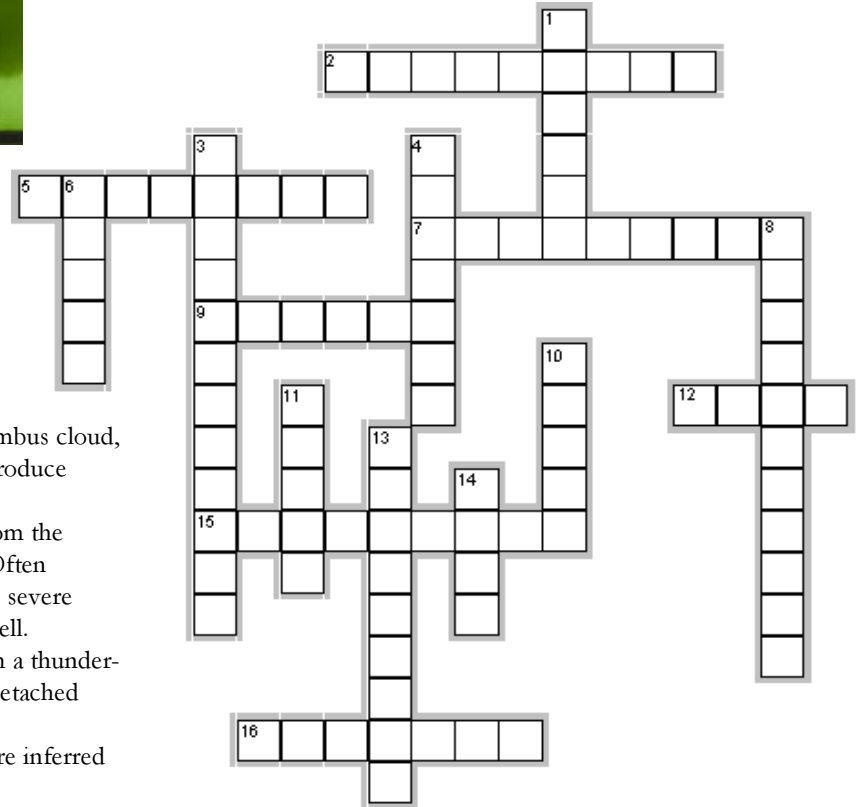
### Down

1. A cloud extending from the base of a towering cumulus with a rotating column of air that is not in contact with the ground
3. A dark, horizontal cloud base with no visible precipitation beneath it. It typically marks the location of the thunderstorm updraft.
4. A violently rotating column of air with circulation reaching the ground. It nearly always starts as a funnel cloud and may be accompanied by a loud roaring noise. On a local scale, it is the most destructive of all atmospheric phenomena.

### ARL Text Messages Solution

#### Across

3. ARLSIXTEEN—Property damage very severe in this area.
6. ARLFOUR—Only slight property damage here.
8. ARLFOURTEEN—Situation becoming critical.
11. GREETINGSBYAMATEURRADIO—ARL Fifty
12. SEARCHANDRESCUE—ARL Twenty One
13. MEDICALEMERGENCY—ARL Thirteen



6. The flat, spreading top of a cumulonimbus cloud. Some may spread hundreds of miles downwind from the thunderstorm itself, and sometimes may spread upwind.
8. A cloud near or on the ground, often appearing beneath a condensation funnel and surrounding the base of a tornado. When this cloud appears beneath a thunderstorm it will confirm the presence of a tornado, even in the absence of a condensation funnel.
10. A subjective term for warm and excessively humid conditions.
11. Issued when the risk of a hazardous weather has increased significantly, but its occurrence, location, and/or timing is still uncertain. It is intended to provide enough lead time so that those who need to set their plans in motion can do so.
13. The leading edge of surface winds from thunderstorm downdrafts; sometimes associated with a shelf cloud or roll cloud.
14. The dissipating stage of a tornado, characterized by thinning and shrinking of the condensation funnel. Damage still is possible during this stage.

### Down

1. ARLTWENTYFOUR—Evacuation of residents from this area urgently needed.
2. ARLEIGHTEEN—Please contact me ASAP.
3. ANXIOUS TO HEAR FROM YOU—ARL Twelve
4. ARRIVED SAFELY—ARL Sixty Four
5. EVERYONE SAFE—ARL One
7. ARLSIX—Will contact you ASAP.
9. ARLTWENTY—Temporarily stranded.
10. COMING HOME—ARL Two

## Tabletop After - Action Review

### Lessons Learned

The most recent tabletop exercise and the discussions following uncovered areas in our emergency communications that need to be fine tuned. The items could be divided into two basic categories; equipment and procedures. The two categories are interdependent to the extent that conditions in one group affect the other. Let's take a look at some specifics.

**Frequency Agility** - During the exercise we used at least three separate VHF simplex frequencies. The Resource Net used our weekly net frequency to accommodate those individuals who self-activated and the frequency was preprogrammed into all ARES members' radios. The activation plan also specifies use of this frequency. The tactical net was conducted on another simplex frequency with a back-up net on a third simplex frequency which was used for passing some of the message traffic.

This operating scenario raised several questions. The first involved cross-band operation. Multiple frequency operation is necessary for efficient movement of information. When an operator is using an HT on UHF to cross-band to a higher power VHF transceiver, they may not have the option to move to a secondary frequency to pass information. Some dual-band transceivers offer the option of remote control using DTMF tones from the HT. When planning a cross-band set-up you need to verify the ability to change frequencies.

**Programming** - Knowing how to program new frequencies on the fly and how to rapidly switch frequencies was another equipment related concern.

**Back-up Net** - The operating procedures used when utilizing a back-up net to pass message traffic need to be clarified. The procedures for listing and passing traffic need to be identical to those used on the primary frequency. The net control station (NECOS) on the back-up net needs to follow the same operating procedures as the NECOS on the primary frequency.

**Frequency I.D.** - The frequencies used during the exercise were identified using tactical frequency designators. This procedure helped minimize interference from the radio rubber-neckers and eavesdroppers that can possibly make emergency operation more difficult.

**Audio** - Audio concerns were also among the equipment issues identified. The operating environment is often noisy and full of distractions. The dining room at Perkins

provided distractions very typical of an emergency communications environment as it gradually filled while the exercise progressed and made concentration more difficult. A couple of options were used to deal with this environment including speaker/mics and earphone/boom mic combinations.

**Tactical Calls** - Operating with tactical callsigns is a distinct departure from normal. Using good station identification procedures minimizes the amount of chatter on the net.

**NECOS** - The net control stations play a vital role in maintaining accurate and efficient emergency communications. We need to make sure the procedures used by the NECOS are exactly the same from one net to another, from one individual to another. In the heat of battle, when habit developed through training takes over, we all need to be operating from the same page to maintain accuracy and efficiency.

These are some of the main items identified in the after action review. We will continue to work on these items on our weekly net on Monday evening. Everyone is welcome to join the discussion and contribute to improving our emergency communications.

*BREAK - OVER*



### **ARES Breakfast**

***Don't forget your HT this month!***

Saturday April 8th

7:30AM

Perkins Restaurant  
Savage, MN

### **NECOS Schedule - April 2006**

<b>3 Apr</b>	<b>KB0FH Bob</b>
<b>10 Apr</b>	<b>AB0YQ Steve</b>
<b>17 Apr</b>	<b>K0KTW Pat</b>
<b>24 Apr</b>	<b>W0NFE Bob</b>
<b>1 May</b>	<b>KB0FH Bob</b>