



# The Wisconsin ARES/RACES Emergency Coordinator



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**WISCONSIN  
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The WEC Newsletter is sent monthly to all American Radio Relay League Emergency Coordinators in the State of Wisconsin. It is intended to provide a forum for ECs to share ideas concerning the organization and training of their respective groups, and as a source of news concerning ARES and RACES activities in the state.

Comments, suggestions and articles (finished or in rough form) are solicited from the readers.

This newsletter and other important documents are posted on the Wisconsin ARES/RACES web page at:

<http://wi-aresraces.org>

in PDF format, shortly after each issue is published.

**Deadlines:** The newsletter is mailed on or about the 15<sup>th</sup> of the month preceding the date shown on the issue. Thus, the February issue is mailed on or about the 15<sup>th</sup> of January. Articles and notices must reach the editor no later than the 1<sup>st</sup> of January to be considered for the February issue.

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## A Note From Stan

This month's issue has two articles related to ham support of hospital emergency communications, an aspect of Public Service that has been largely unexplored in our state. ECs, please carefully read both articles and request the pamphlet mentioned in the second article. Then, think about the issues involved, and perhaps talk about them with your AECs and members. We need to gear up in this vitally important area in Wisconsin. All it takes is one mass casualty incident to seriously overload all regular public safety channels, including hospital communications with exterior agencies and even within the hospital. You can expect to hear more about hospital

emergency communications here in future months. It is a very hot topic in connection with Bioterrorism preparations throughout the country.

## HOSPITAL EXPERIENCE

by Patricia Stolte, KA1KUK

*[Bill Stolte (N9VBJ), Ozaukee County Emergency Manager, queried his sister Pat, now an ARES member out west, on her experiences in serving the emergency communications needs of hospitals. Bill queried Pat because he knew of her hospital ARES experience and because, although we have had an antenna system installed for many years in our St. Mary's - Ozaukee Hospital (SMO), new construction at the hospital required that we relocate the system. In addition, we are tooling up to service SMO during exercises planned for later this year, including taking over all communications in case the hospital's systems fail. Therefore, Bill asked Pat for a thumbnail of her experience. Pat's reply came by email on 28 June, and Bill shared it with me. Her comments were extremely enlightening, so I asked for permission to reprint her message here. Take a look, ECs. You may be dealing with these very issues much sooner than you expect. Bill's first query to Pat dealt with whether she had come across any Electromagnetic Interference (EMI) issues with HTs and higher powered rigs used in the hospitals, so that is the reason why Pat starts with this issue first. Edited.]*

We have had no EMI issues surface during our hospital work, nor have I heard of any. During my stint, we didn't do any specific tests of the radios inside or next to the hospital's equipment to look for interference while I was there. On the other hand, it might have been tested for and fixed before I got involved. It is an important issue, since the best place to locate ARES folks and their equipment is at or very near the emergency room.

My personal experience with hospital communications revealed lots of other, sometimes strange, problems, all centered on our ability to get an RF signal where it was supposed to go. We were in a very poor spot for RF transmission and reception, and the hospital I worked with initially didn't have a room for the hams or cabling so that we could work from the inside. Therefore, we based our truck with antennas outside and worked just inside the emergency room, or if the weather was nice we simply worked outside. We had to string up the antenna to the roof of one of the

buildings, which turned out also to be the helicopter pad. We were somewhat concerned about that, but the hospital folks said the antenna was small enough so that it wouldn't interfere with flight operations.

During relay of messages from inside the hospital to a base station operator outside, we found it very difficult going at certain inside locations. Clearly, this was due to the building structure interfering with the signal. Even within the building, communications from one place to another with HTs was sometimes limited, again because of the building's structure. But we did managed to find good spots, so we were never out of touch for very long. Each hospital will likely be unique in this, so teams will need to work the floors to find their hospital's good spots, and then use those as the internal bases. Teams also should be sure to do EMI checks at the good spots, and also in the emergency rooms.

Some hospitals in our area (we named these "high tech hospitals") actually gave ARES ops their own room to work from. My hospital had not reached that stage when I first started working with them, and later, when I left hospital ops to begin working in the EOC, they had just gotten around to mounting antennas and stringing coax into a room in the ER area for us. I didn't get to participate in the testing of all that new stuff since I already moved on to EOC ops. But unless ARES has a room to work in, it becomes really, really hard to hear the radios, especially if operations are located at the emergency room during a crisis with screaming and sirens and all the other loud noises.

We had one or two exercises a year with multi-hospital nets, where we gathered info and relayed info with fake messages consisting of patient transfers and resource requests between hospitals. This included the EOC ops, too, and surprisingly, EOC communications failed most often. We never seemed to be able to get the EOC communications to play well, even though they knew they were suppose to play and transfer traffic. They received the messages but when asked to do something or get something, they never played back. They claimed they were overwhelmed with the extensive message content [*Note: Packet would have helped this! WB9RQR*] and so on, in addition to everything else they were doing, because they were doing an earthquake drill at the same time so they had all their other work to do. Oh no! That reminds me. I am one of those EOC ops now!

One time we used a scenario in which an earthquake took out most of my hospital, and we had to set up a makeshift emergency room in tents across the street. I worked the tent site and relayed info to another ham stationed at the old site, outside the real hospital, and

he passed traffic to the net control. That was a lot of fun, mostly because the hospital totally got into it with us.

Another time there was an actual incident (for real!) in which communications, even emergency communications from the hams, totally failed. This is a real life example that you can use when talking with the hospitals if they don't see why they should ever need ham support. It occurred when my hospital lost all their commercial power, and both backup generators failed as well. The backup generator failures turned out to be due to a burnout of two simple \$5.00 parts, one on each unit. On top of all that, when the electric company sent a mobile truck generator to supply power until regular power could be restored, the truck generator failed, too! The whole scene turned out to be an unanticipated compounding of problems that no one believed could ever happen all at the same time!

Anyway they had to evacuate the whole hospital. But they didn't/wouldn't activate ARES even though we tried to tell them we could do internal hospital communications, as well as handle their external communications and patient transfer messages (they lost all of these functions, totally). So, they struggled with using their own folks as runners and relaying info on the ambulance radio for external communications. They initially tried using their emergency walkie-talkies for inside communications, but they didn't anticipate that the batteries would run out in half an hour to an hour, and they quickly used up the single set of spare batteries they had on hand. After that, they sent someone out to go buy all the batteries available at local stores. That helped, but of course that strategy wouldn't work at all in an earthquake or some other disaster where the stores wouldn't be open or the roads would be impassable. Finally, after the fact, they realized they completely blew it by not letting the hams help with the communications, which would have freed up their own people to help the patients. That's when things really seemed to change with my hospital's attitude toward ARES. After this incident, they agreed to give us a room and install a permanent antenna for us. Apparently they got badly nailed by the powers that be for not letting us help.

We also did earthquake drills, where we had to transfer patients from one area/hospital to another. Some ARES folks went along in busses (participated in the yearly military drill that did this) with live (but fake) patients that got flown in by military aircraft from Portland, Oregon. In Portland, they were doing an earthquake drill that supposedly leveled the whole area, and they had to transfer all their patients out of state. So they flew the patients into the Air Force base here and transferred them via busses to all the local hospitals. Our ARES folks were tasked to maintain com-

munications between the Air Force base, busses and each hospital during movement of the patients.

The main problems we had focused around communications between the hospitals and net control. Many hospitals here are located in bad positions due to valleys and mountain ranges. So it was always extremely difficult, even under normal conditions, for net control to communicate with all the hospitals – WITHOUT using the repeaters (don't forget to have your folks train during drills both with and without the repeaters). Many times my hospital was the only one able to communicate with some of the outlying hospitals. And my hospital had really bad local communications because it was in a valley (this was before we got them to put up a permanent outside antenna), so it was all quite challenging. Be sure to have your guys practice having some of the hospitals relay messages from another hospital in addition to sending their own. If your people (both ARES ops and the hospital net controls) don't experience these communications problems during practice, then when in a real emergency, they won't know if the communications losses are due to terrain or equipment failures or if the hospital is really leveled or needs help some other way.

These exercises really stress the net control operator, that's for sure. On the other hand, we have found that if the NC is not overwhelmed, it is not usually a good, realistic exercise. ARES folks really had to struggle to utilize side channels for many messages, so that the net control frequencies did not get tied up with routine stuff, thus making it impossible to pass really critical messages. We had this issue pop up so many, many, many times that it felt like an old friend (or more appropriately, an old enemy). Of course, this means that you need more people at the net control site to monitor the side frequencies in use, but that is what we found was necessary.

I hope this helps you!

## How to Answer

By Dennis Rybicke, K9LGU  
Wisconsin Section Traffic Manager (STM)

Last month, we considered what the sending station says when checking in to a net, listing and passing traffic. So what happens if you can handle the traffic listed for Somewhere, WI?

The first statement you will say can be when you check in or after the NCS asks who can handle traffic for Somewhere, WI. You give your call followed by, "I can take Somewhere." The NCS will give you instructions -- either to handle the traffic on frequency or to move. For example, the NCS might say, "K9LGU, call N9BDL and pick up one Somewhere." You will call

the station with the traffic on net frequency, check the copy if necessary, tell him to go ahead and begin to copy the message.

If the NCS says, "K9LGU, call N9BDL and arrange," you (the receiving station) suggest a frequency and move. You know best where you have a TV birdie or how badly the splatter down the band is affecting your reception. You pick the spot, ask if the frequency is in use, and call the station with the traffic.

Chances are, the sending station will break often during the sending of the message, and so you can interrupt and ask for clarification or repeats. If not, when the sending station completes the message and stands by, you can ask for fills. There are some easy ways to do it. You might just say, "Please repeat the message number," or "Please confirm the phone number as 920-563-2439." If you're uncertain about the spelling, you might ask "Please spell phonetically the word after..."

The prowords included on the famous pink card, ARRL Operating Aid FSD-218, can be very helpful. Some of them are, "All after...", "All before...", "Break" (the separation between addressee and the text or the text and the signature), "Confirm...", "Say again..."

Sometimes a sending operator tends to speak a little too fast for the neophyte receiver. If the sender writes out the message as he sends it, this is less likely. The request, "Please speak slower," is always honored. The idea is to get the message through -- accurately.

## Ham Training Pays Off for Hospitals

*[From the ACS Newsletter, 29Apr02, Ken Bourne (W6HK), editor. Mentioned in the article is April Moell (WA6OPS), Orange County EC, a ham/health professional well known for her work in interfacing hams with hospitals. Your SEC recently purchased a number of her booklets entitled "Amateur Radio: A Communications Resource for Hospital Emergencies". The booklet is designed to explain ham radio to hospital officials, as an entrée for an ARES/RACES group setting up a relationship with their local hospital. Any EC in Wisconsin can get a copy by just letting me know. I suggest you use it in this way. First, read it yourself. Then, call your hospital (or clinic, in rural areas) administrator, and explain who you are and that you would like to meet with them at some later date, but first, they need to read the booklet. Drop it off or mail it to them. After an appropriate time, call them again and set up your meeting. Be sure you are ready to commit hams to a hospital team, first! The booklet will explain everything, but be prepared for it to provide you with some new dilemmas. Nevertheless, we need to address ham hospital emergency communications where we can, to be prepared for mass casualty incidents. I urge you to at least read the pamphlet. Just send me a note to get one. –Stan]*

OCRACES and HDSCS Respond to Placentia Train Wreck

Orange County RACES (OCRACES) and the Hospital Disaster Support Communications System (HDSCS) responded quickly on Tuesday morning, April 23, 2002, after a 6000-ton mile-long BNSF freight train collided head-on with a Metrolink double-decker commuter train in Placentia, California. Two passengers were killed and more than 260 were injured--many seriously. Ironically, the mishap occurred just as emergency responders and 16 hospitals in Orange County were about to hold a large-scale drill to test patient triage and transportation procedures for mass-casualty incidents.

Two-dozen HDSCS members were awaiting drill assignments when they were advised of the train collision. Suddenly the phrase, "This is not a drill," was heard on radios used by the various agencies planning to be in the drill. Orange County ARES Emergency Coordinator and HDSCS Net Control April Moell, WA6OPS, immediately assigned the drill-ready hams to the 14 hospitals expected to receive crash victims. For the next 4 1/2 hours, 28 HDSCS members provided vital links among the hospitals, the county's Central Point ambulance dispatch center, and the Orange County Emergency Medical Service (OCEMS) agency. OCRACES members were also involved in communications involving EMS and the Orange County Sheriff's Department (OCSD).

Net traffic included verifying victim dispatch and patient counts, locating victims, providing hospitals with information for inquiring family members, and liaison with hams supporting the Red Cross. Within some hospitals, hams provided direct communication among triage areas, emergency departments, and command posts.

HDSCS is an ARES group with agreement to support all 35 hospitals in Orange County, and has a Memorandum of Understanding with OCRACES for communications involving mutual aid to incidents. OCRACES members provided communications in support of OCSD, OCEMS, and other government agencies during this incident. More information is available on the HDSCS Web site <<http://www.hdscs.org>> and on the OCRACES Web site <<http://www.ocraces.org>>.

EC April Moell said, "All of our drill experience over a many-year period and learning from previous responses to real activations paid off as we responded to the hospitals likely to receive patients. Because of our 'self-activation' agreements with hospitals and our county EOC, we were able to respond immediately to the hospitals and the county EOC based on our early awareness of the incident. Some of the hospitals also called or paged HDSCS but at that point most of our communicators were already in route or on site. While we supported external communications

throughout, at some hospitals additional communicators were assigned to support internal communications. A total of 28 communicators were involved. Of the 14 hospitals to which we responded, 12 received patients from the incident."

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## White House Greet Amateur Radio Operators

*[Here is a message from the White House for us! Courtesy of the ARRL Web site, ARRL Bulletin 37, 19Jun2002.]*

President George Bush has sent his greetings to all Amateur Radio operators, acknowledging their role in emergency communications and in generating international good will. The White House letter came as hams in the US marked Amateur Radio Week, June 16-23, and prepared to participate in ARRL Field Day--an emergency preparedness exercise.

"I salute amateur radio operators for your work on behalf of public safety officials," the President said in a letter dated June 18. "I also commend your interest in communicating with persons in other parts of the world and learning about other cultures and countries. Your involvement builds understanding and goodwill around the globe."

For the first time, Field Day was open to participation by amateurs throughout the Americas and the Caribbean.

The President's letter acknowledged ham radio's "important role in emergency communications, assisting law enforcement personnel and other emergency services as they carry out their responsibilities."

ARRL President Jim Haynie, W5JBP, expressed his delight at the presidential communication. "I'm extremely pleased that the president has decided to recognize the accomplishments of Amateur Radio operators throughout America," he said. "Amateur Radio is a real asset to America, and even more so after September 11. Amateur Radio has always played a big role in disasters and emergencies, and I'm very proud of it."

President Bush said First Lady Laura Bush "joins me in sending our best wishes."

Governors in several states issued proclamations designating Amateur Radio Week or Amateur Radio Month.

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