Hospital Emergency Communications

Waller County ARES training material used with permission from Christine Smith, N5CAS.

With the development of new commercial communication products, there has been increasing discussion of new missions for Amateur Radio. An important mission exists for our service that isn't new, but is largely unfulfilled. Many ARES or RACES groups would say they support local hospitals. However, that support is usually poorly planned at best.

Often, the only support hams provide is telling hospitals what ham equipment to install. Then they simply wait for someone to tell them to go to the hospital in a disaster. As a result, hospitals don't realize that hams can help in other communication emergencies, such as isolated phone outages. And hospitals become an afterthought when an area-wide disaster hits.

Hospitals are vital organs in every community. They should have the highest priority for communications support. Mass casualty incidents and area-wide disasters are not the only situations in which back-up communications are needed for hospitals. Any telephone system failure in a hospital is a disaster too. The potential for serious consequences to patients is high. When patient care is at stake, hospitals need every resource possible. Amateur Radio can be a vital resource, provided that hams prepare and plan thoroughly. Thus the mission: supporting communications that are critical to patient care.

A Working Model

Since 1980, the Hospital Disaster Support Communication System (HDSCS) has provided communications backup to hospitals in Orange County, California. Interest started with one hospital; now 36 facilities are supported. Each facility has formally requested the involvement of Amateur Radio.

HDSCS is a special ARES group. Operating under ARES frees the group to interface directly with private and public hospitals at all times. It is important to be able to respond to hospitals individually when they request assistance and to self-dispatch in accordance with designated plans in an area-wide emergency. HDSCS has a memorandum of understanding with Orange County RACES for occasions when hospital emergency communication to and from government entities are required. This MOU also facilitates mutual aid between the groups should that ever be necessary.

HDSCS has two components:

- The *Call-Up* system activates members for phone outages and mass casualty incidents.
- The *Core Team* system is a mechanism by which members self-dispatch to nearby hospitals in area-wide emergencies.

Hospitals activate a *call-up* responder on their list when a communications problem occurs. A group page number is also provided for hospitals to use if calls are unanswered or there are limited opportunities to make calls. The first HDSCS operator contacted takes over, putting the system in motion to rapidly get responders to the hospital.

Core Teams are made up of individuals who have committed to respond to assigned hospitals without first being called when a major area-wide disaster strikes. Core Team responders do not take on assignments from other ARES/RACES groups that they belong to unless cleared from

HDSCS first. This system allows for flexibility should Core Team responders be in other areas of the county away from their assigned hospital or should it be determined that a hospital has no one responding to it. Responders know they could end up assisting at other hospitals if the situation warrants and they prepare accordingly.

Keys to Success

Since 1980, HDSCS has responded to over 70 hospital communication emergencies. HDSCS has also been recognized by FEMA for their "Voluntary Communications Support in Times of Crisis or Disaster." The group is recognized in the county's Mass Casualty Medical Response Plan. It is a member of the three hospital disaster drill planning committees and also participates in the county's Disaster Advisory Group. This level of acceptance didn't just happen -- the group earned it. Several factors led to this degree of credibility and success.

1. **Preparedness:** HDSCS hams are ready to respond from home, from work, and when on the road. There's no time to rummage through the shack to figure out what to take. Whether or not the hospitals in need have external antennas or radio gear doesn't matter, HDSCS hams prepare as if there will be none. Group hams have often found command posts relocated and away from original equipment locations as well as needing to provide communications unit to unit. Having portable gear and the capability to be flexible is a must.
2. **Consistency:** Many members have been with the group for more than 10 years. Four coordinators have been involved since the beginning. Many hospitals know the responders by name, and the committees they attend know them too. As a result, the hospitals keep them in mind. That leads to being called out, not just in emergencies, but also for stand-by operations when phone systems are being upgraded, and for public service activities like hospital-sponsored 10-K runs.
3. **Training:** Members of HDSCS learn about the unique communication needs of hospitals. Meeting programs feature presentations on county emergency medical services, hospital departments, procedures and much more. The group drills with each hospital at least once a year, testing the activation procedures as well as communication links.
4. **Multiple channels:** One repeater or simplex frequency for hospital communications is not enough in most scenarios. Alternates are needed for high traffic levels and when primary repeaters are inoperable or unavailable. Autopatch capability is a plus. Patches have been vital in several phone outages.
5. **Reliable tactical voice communications:** Over 99% of inter-hospital and intra-hospital communications are short, point-to-point tactical messages. Many involve contacting physicians and staff, both inside and outside the facility. Requests for supplies, whether within the hospital or to an outside source, have almost always been for less than three items. On many occasions, the ham gives the microphone to a hospital staff member for third-party communications. Packet radio and ATV may be exciting modes, but when it comes to supporting hospitals, voice communications are what is needed.

Making a Difference

To date, HDSCS has responded over 250 times to Orange County hospitals. More than 70 of these have been emergency callouts for phone failures and activations for earthquakes, flooding and fires. The remainder has been stand-by operations and drills.

By making the effort to learn, prepare, drill and respond, the group has made a difference-a difference that has positively affected people's lives. Emergency messages have included orders for blood, a "stat" (immediate) request for medication from the Neonatal Intensive Care Unit to the Pharmacy, an urgent call for a physician to assist in an emergency Cesarean section, and a call for priority response from the power company to a hospital when its emergency generator failed after an earthquake. The bottom line is patient care. In Orange County, Amateur Radio plays an important role.

Reference Links:

For more information on the topic presented, please consult the following link:
http://members.aol.com/emcom4hosp/