Hurricane Katrina

Amateur Radio Emergency Communications Relief Effort

Operations Review Summary

Submitted by,
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Good morning. My name is Greg Sarratt. I am an amateur or ham radio operator. My FCC issued amateur call sign is W4OZK. I have been a radio amateur for over 22 years and hold the highest class of FCC license. I am the Alabama State Manager for the ARRL, the national association for Amateur Radio. Thank you for allowing me to speak about my experiences in the Katrina relief effort.

During Hurricane Katrina, amateur radio provided volunteer operators to support many served agencies such as Emergency Management, National Weather Service, Hurricane Watch and the American Red Cross. This is business as usual for many radio operators in the Amateur Radio Emergency Service, or ARES, nationwide.

After Katrina, amateur radio provided many more volunteer operators to support an even larger host of served agencies that requested our services. The ARRL coordinated hundreds of amateur radio operators who traveled to the devastated area and provided critical communications capabilities. This work continued for many weeks.

Katrina almost wiped out communications in southern Mississippi. Both Public Service and amateur communications were decimated. Local communications workers and volunteer amateur operators, suffering their own personal obstacles were greatly reduced in numbers, equipment and capacity during the storm.

I arrived on the afternoon of August 30th in Mobile, Alabama to set up and provide communications for a Southern Baptist Kitchen site in a joint Amateur Radio Emergency Service (ARES) / Southern Baptist communications role.

I was called by the ARRL on September 1st and was asked to establish relief communications for the American Red Cross. The American Red Cross quickly realized they had no communications into the disaster area and requested an immediate force of at least 700 volunteer amateur operators to set up and maintain communications at numerous locations across the Alabama and Mississippi disaster area. The Louisiana disaster area was a secondary task for us and was handled by amateurs in that state, but we did provide them a few amateurs near the end.

On September 3rd I arrived at the American Red Cross Disaster Relief Headquarters in Montgomery, Alabama and immediately established an amateur radio operations post in this center. The Montgomery Amateur Radio Club was instrumental in providing a radio station and local support throughout this operation. The next day began a 37 day effort that would ultimately result in over 200 amateur radio operators from 35 states and Canada being processed and deployed to the devastated region through the Montgomery center. Amateurs were deployed to multiple Mississippi counties and towns to set up at kitchens, shelters, Emergency Operation Centers, distribution centers, warehouses and various command and control centers.

The sufficiency and effectiveness of amateur radio to re-establish communications systems with equipment they brought in, much of it owned by these volunteers and quickly building complete systems from scratch, was tremendous. 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. These systems of equipment and operators were very effective, not only for amateur purposes but in support of Emergency Management, Red Cross, Southern Baptist, Salvation Army and many other organizations.

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. 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.

Hundreds of volunteer amateur radio operators made up the largest Amateur Radio Emergency Service army in history to provide critical emergency communications support. Our army included amateurs of all genders, ages, types and backgrounds. Many worked from home, supporting field operations; and others were field-deployed in the devastated region. When needed, amateurs provided many services in addition to communications, working long hours, living in terrible conditions, contending with heat, bugs, ants and in many cases much worse.

We deployed several hundred thousand dollars worth of equipment and resources to the area. Individual amateurs and dozens of amateur radio manufacturers donated thousands of dollars of radio equipment and resources. Several amateur-owned self-contained communications vans and trailers were effectively utilized in the disaster area.

Radio amateurs bring a wealth of resources to the public service and emergency communications table: Most amateurs possess a broad range of communications and technical skills outside of amateur radio, thus creating interoperability, at both the systems and operations levels. Many amateurs are familiar with Emergency Management, public service and Red Cross communications, practices and equipment. Amateurs practice many of their communications skills on a daily or weekly basis. They bring the ability to set up communications systems quickly and then effectively communicate with them.

Amateur radio operators provided technical skills in addition to communications. During the relief effort the technical knowledge of amateurs was thoroughly utilized: Amateurs repaired EMA repeaters, radios, antennas, generators, forklifts, telephone systems and a host of other electronic items.

The most important feature that amateur radio brings to the table in emergency and disaster communications is interoperability. You may have heard amateur

radio described as "old technology." That's not really true; we use state-of-the-art Digital Signal Processing, surface-mount construction, advanced software and hardware technology, but our newest equipment can communicate with our oldest. We use many bands throughout the frequency spectrum, supporting short, medium and long-range communications.

The individual amateur radio operator is a part of the interoperable system. 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.

Also, I am proud to mention, the amateur radio emergency service received favorable mentions in the WHAT WENT RIGHT section of, The Federal Response To Hurricane Katrina Lessons Learned report recently submitted to the President of the United States.

And amateur radio also gained praise for our efforts in the A FAILURE OF INITIATIVE hurricane Katrina report generated by the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina.

Mentioned in every panel discussion during this two day session.

And finally, our interface and working relationship with the FCC personnel contributed to our success.

There are many ways to improve disaster preparedness. We have conducted several lessons-learned meetings and certainly have learned many lessons from this event.

The ARRL and amateur radio will continue to Prepare, Train, Practice and Test ourselves for the next event. Public Service is a large component of the charter of the amateur radio service. We support hundreds of public service activities across the United States each year.

There should be permanent amateur radio stations built in to Federal, State and local emergency management operation centers, select public service, Red Cross chapters and other served agencies. Local teams of amateurs would support these operations.

The ARRL has greatly increased emphasis on training over the past five years and this has paid off, but we need additional assets to provide enhanced training for our operators.

The ARRL must set up additional training and management of a special core of first responder amateur operators that can immediately go into a disaster area and setup vital communications systems.

The ARRL must raise the awareness of amateur radio within the government agencies, Emergency Management and first responder community such as police, fire fighters and emergency medical personnel. This awareness will let the first responder community know what amateur radio can do for them.

The ARRL needs a nationally recognized credential system to be effective when disaster strikes, possibly a FCC credential issued to each responder. An FCC credential makes sense because the amateur radio service is part of the Wireless Telecommunications Bureau and licensed by the FCC. This credential will enable amateurs to quickly and effectively go into a disaster area, and be immediately accepted by Emergency Management and first responders.

Some recommendations that I believe the Panel should consider:

The FCC and ARRL work together to issue FCC credentials to the ARRL for amateur radio responders.

The FCC and the ARRL should be key partners in the amateur awareness program for multiple government agencies such as FEMA, state and local Emergency Management and first responder community.

The FCC and ARRL should continue working together on critical frequency spectrum protection and interference avoidance issues.

In Conclusion:

The disasters of 2005 have proven the worth of Amateur Radio Service and its selfless cadre of operators; we were tested as never before. While we wish the summer had been uneventful and that our annual Field Day preparedness exercise won't happen again until next June, we need to be vigilant and recognize that to be fully prepared, we must assume the next "big one" is just around the corner.

During this event, my experiences re-affirmed that many amateur or ham radio operators are much more than hobbyists. I saw amateurs sacrifice, contribute and succeed in providing many weeks of critical communications and additional services to meet dynamic and unique needs. Amateurs created interoperable emergency communications systems where there were none and saved lives as a result. Moreover, they brought the love of public service, a variety of communications, contesting, training, and public service skills and most of all by applying the amateur "can do spirit" to help people in need.

This was indeed, an example of our favorite phrase, "When all else fails… Amateur Radio".

It was my pleasure meeting and working with hundreds of amateur radio operators during this event. I am proud to have been a part of this relief effort.

Thank you,

Submitted by the ARRL, *The national association for AMATEUR RADIO*

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