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Homework 7 - Ham Radio during the 2003 NE Blackout

Ham radio occupies a small yet important niche in communications. Most modern communications including televisions, cell phones, and Internet are susceptible to natural disasters and massive failures because of their wide use and reliance on electricity. Ham radio has the advantage of simple old-fashioned radio technology and the generous services of volunteer radio operators during times of emergency. The Northeast Blackout of 2003 illustrated the importance of the amateur radio community in providing communication.

The Northeast Blackout of 2003 affected over 50 million people in the northeastern US and parts of Ontario, Canada. Cellular phone towers were either overloaded or nonfunctional due to loss of power. People who were stranded on elevators or in need of emergency help were unable to call out, but amateur radio operators were instrumental to rescue efforts. Most operators who are affiliated with the Amateur Radio Emergency Service (ARES) were well prepared with battery-powered equipment and provided emergency communication services to nonprofit organizations. The Radio Amateur Civil Emergency Service (RACES) responded to the communication needs of federal agencies. Additional assistance was not limited to the blackout regions; for instance, ham radio stations in unaffected areas including Connecticut, New Jersey, Nebraska, and Canada were on standby and prepared to relay information.

When the blackout started at 4:15PM ET on August 14, 2003, many local amateur operators went on the air immediately and opened emergency nets to relay emergency traffic. Ham radio operators quickly provided radio services to the Red Cross, helped ambulances communicate to hospitals, and managed many other emergency communication situations. Hams accompanied emergency responders including police and firefighters.

The VHF and UHF bands were mainly used for communication during the blackout because most portable handheld transceivers operate only on these bands. Several larger rigs broadcasted on HF for long distance communication. Most repeaters were still operating on backup generators and actively relayed information for mobile stations during the blackout.

Several television and radio stations ceased to operate due to loss of power. Functional broadcast stations were largely ineffective because fewer people were able to reliably receive broadcasts during the blackout. Amateur radio operators passed around important announcements and useful information to locals such as which stores and gas stations open for essential supplies.

Ken Davis, KB2KFV, expressed his thoughts that amateur radio operators appeared much better prepared than the local governments in response to the blackout. After 9/11, the Department of Homeland Security recognized the importance of the amateur radio community when large federal grants were given to the American Radio Relay League (ARRL) to train more ham radio operators in case of future emergencies. The training evidently paid off in the 2003 Northeast Blackout because the situation was handled like clockwork. The New York ARRL region coordinator, Tom Carrubba, said that about 100 hams handled communications for all of New York City with a population of 10 million people. Many hams today are involved with drills and exercises to prepare for future emergencies.

The quick response and preparedness of the amateur radio community in providing emergency communication is quite remarkable. Many ham radio operators often respond to emergencies long before government officials take action. Natural disasters and crises in history have repeatedly demonstrated the resilience of radio technology and importance of ham radio operators in a “high tech” Internet and cell phone age.

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