Public Service and Emergency Communications

Remembering 9–1-1

n September 11th America was attacked as never before as four commercial airliners were hijacked and turned into giant bombs. Two of those aircraft slammed into the towers of the World Trade Center in New York City, one ripped through the Pentagon, and one crashed into a field in Somerset County in western Pennsylvania. A nation watched in horror and disbelief as the towers crumbled to the ground, trapping thousands in the buildings as well as rescue workers on the ground. As we go to press, over 6,000 people are still missing.

Almost immediately ham radio operators mobilized at all three sites to help. As school children and workers rushed home to be with their families, many amateur radio operators were already on the air providing emergency communications.

In one of amateur radio's finest hours, hundreds of ham radio operators from five states and the District of Columbia were mobilized, all responding at a moment's notice. With cellular telephone service severely damaged and overloaded, amateurs stepped in and provided critical communication support for many emergency management agencies, the American Red Cross, the Salvation Army, and other relief agencies. ARRL Vice President Kay Craigie, WT3P, said, "Compared to the sacrifices by emergency responders in New York City and at the Pentagon, it was a small thing, yet a thing that should not go without notice."

This month we'll look at some of the initial response to this attack on America, starting with a lesser-known aspect of amateur radio participation.

MARS Members Support **Federal Government**

With major incidents occurring within 200 miles of each other and major cities being assaulted by terrorists, one of the federal government's many concerns was keeping in touch with all of its agencies and offices across the nation.

Within 15 minutes of the first crash. the first of many emergency information



Ryan Jairam, AB2MH, provided communications from an emergency shelter at a school near Battery Park City in New York. (Photo courtesy AB2MH)

messages had been transmitted by a Military Affiliated Radio System (MARS) member to the Pentagon. Within an hour, a coast-to-coast backup net was forming. The Army MARS assignment is "Preparing for the Worst."

The initial call for assistance came from the National Communications System in the Department of Commerce. The NCS assists the President, the National Security Council, and others in the coordination and planning for national security and emergency preparedness communications for the federal government under all circumstances, including crisis or emergency, attack, and recovery. An e-mail alert just before 10 AM EDT (about one hour after the initial plane crash into the World Trade Center) ordered NCS participating stations to operational level 2, "emergency potential exists." The alert, said the NCS message, "is requested by the FBI, the National Coordinating Center for Telecommunications, and the General Services Administration."

This activated a national coordination net. By 2 PM more than 200 stations had checked in. Among the participants were FEMA outposts, FAA offices, the

American Red Cross, and state emergency operations centers, as well as the MARS members enrolled in SHARES, the HF "Shared Resources" program of the NCS.

A general alert to all MARS members came soon afterward from Army MARS headquarters at Ft. Huachuca, Arizona, and then a formal request for assistance from FEMA.

Wilbur Goll, WØDEL, of Shawnee, Kansas (Air Force MARS AFA3HY) serves as central area net control for SHARES. He counted 63 Army MARS, 44 Navy-Marine Corps MARS, and 28 Air Force MARS stations in the initial operation. He also recorded 54 federal agency offices, 35 Civil Air Patrol stations, and 6 commercial carriers such as AT&T participating.

One of the first government agencies to require emergency communications was SHARES itself. Located in an office building near the Pentagon, the SHARES staff was immediately evacuated. Operations chief Ken Carpenter, KD6DBX, a retired Marine Corps communicator, quickly returned to the air with portable equipment at a secure northern Virginia location.

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Regional SHARES nets also activated across the country, bringing in many more hams. Among the busiest was the Northeast Coordination Net, which provided links from Arlington, Virginia, near the Pentagon, to Long Island, New York, immediately outside the disaster zone, to western Pennsylvania. During the first hours 29 stations, the bulk of them hams in the MARS organizations, stood by to handle traffic.

From Essex County, New Jersey, Bill Fitzsimmons, N2LMU (Army MARS call AAR2CB), was on the air within sight of the plume of smoke over the World Trade Center. Fitzsimmons not only joined the SHARES net, he also operated the MARS Region 2 digital gateway (covering NY-NJ), relaying emergency traffic to higher headquarters, including the first bulletin on the crash.

The bulletin was aired within 15 minutes from David Popkin, W2CC (AAA2NJ), the New Jersey state MARS director. He lives in Englewood, just across the George Washington Bridge from Manhattan. By the end of the operation Popkin had initiated 28 "essential elements of information" status reports. These reports included information on the incident, status of emergency medical facilities, local transportation status, general damage characteristics, area utility status, communications status, information source/time of information, and comments. Jeffrey Bixby, W4BIX (Air Force MARS call AFA2EA), of Arlington, Virginia, close by the Capitol, offered his mobile station for use when it became known government buildings were being evacuated. Army MARS Chief Bob Sutton, N7UZY (MARS call AAA9A), credited Army MARS members with initiating 49 "essential elements of information" reports for use by Pentagon planners, including early damage and transportation status reports.

While hams in MARS and SHARES supported long-distance connectivity, many other hams active in the Amateur Radio Emergency Service (ARES), the Radio Amateur Civil Emergency Service (RACES), and other organizations supported operations closer to each of the crash sites.

It Looked Like a War Zone

Shortly after the attack on the 110-story twin towers and the Pentagon, President George W. Bush announced that the U.S. military was being placed on high alert in the U.S. and abroad. The FCC's Riley Hollingsworth suggested that the amateur community remain calm but ready. He invited amateurs monitoring



Damage to the Pentagon extended far beyond this section of the building, which collapsed after being struck by a hijacked airliner. (US Dept. of Defense photo by R.D. Ward)

any suspicious radio activity to contact him, so he could relay relevant information to the FCC duty team. "You never know," he said. He advised monitors to tape such radio traffic, if possible.

Amateur radio operators quickly began to activate. New York/Long Island Section Emergency Coordinator Tom Carrubba, KA2D, began setting up a command channel on a linked repeater system that covered the New York City area. New York State RACES activated to handle emergency and governmental related traffic. Carrubba asked amateurs to be alert, prepared, and patient. In the Washington, D.C., area, Virginia SEC Tom Gregory, N4NW, said Virginia ARES was put on alert immediately following the plane crash into the Pentagon. Virginia RACES was also activated at the state emergency operations center in Richmond as a precautionary measure.

Alert Turns into Activation

Within hours, New York City District **Emergency Coordinator Charles Har**grove, N2NOV, said that ARES members would be used in the search-andrescue efforts at the World Trade Center site in lower Manhattan. Plans called for hams to be on duty 24 hours a day. Not only were cell sites, police and fire communications, and most television antennas lost when the World Trade Center collapsed, the New York City Office of Emergency Management bunker was lost when 7 World Trade Center collapsed later in the day (it had already been evacuated). Besides emergency traffic, amateurs shadowed some New York City officials and medical officials, handled medical traffic, and assisted the American Red Cross and the Salvation Army.

ARRL Hudson Division Vice Director Steve Mendelsohn, W2ML, said that all bridges and tunnels were closed to incoming traffic with heavy security on the bridges. "Jet fighters are in the air criss-crossing Manhattan," he said. "It looks like a war zone there—something out of World War II." On Long Island amateurs supplied communications for the Red Cross. ARES operators were placed on standby at the Emergency Operations Center in the towns of Babylon and Islip. In addition hams staffed two local hospitals.

Report from the Scene

NYC ARES member Ryan Jairam, AB2MH, provided communications from an emergency shelter at a school near Battery Park City. The shelter was set up to house displaced residents. He said, "Net Control on 147.000 MHz last night was done by Adam Fine, AB2IZ, and today and yesterday by Guy Richman, KC2AYG. There were many other hams, from New York metro, other areas in New York State, and tons of ham volunteers from out of New York State, from all over the U.S., many of them Red Cross volunteers."

Red Cross Headquarters was manned by John Kiernan, KE2UN, among others. Charles Hargrove, N2NOV, is on full duty from the makeshift OEM office. "It is truly a phenomenal sight to see from Red Cross headquarters all the way down to southern Manhattan below 14th Street," said Jairam. "It truly embodies our ham spirit and shows that despite all the bickering, code vs. no code, regardless of race or creed or license class, we all banded together to help out in times of tragedy."

Radio Set-up

"We hardly encountered any intermod on the repeater, since even during normal times the city is full of RF and intermod, and the repeaters were more or less prepared for that. Cell phones simply did not work. The Red Cross gave us Nextel phones, but they did not work because of the overload on the system. Some radio operators in remote sites had problems accessing the repeater. Therefore, N2NOV made it a point that we should carry a magnet-mount antenna and a dualband mobile or base radio (at least 25 watts). I carried my ICOM 746 just in case; it had 100 watts on 2 meters. Some hams had to work double shifts, since relief was a little late getting to us. Food and supplies were delayed due to road closings. Volunteers were forced to take public transportation as non-emergency vehicles were *not* allowed into the city."

Monitoring operations from his home in northern New Jersey, CQ Editor Rich Moseson, W2VU, said the net was nonstop with emergency traffic. There were "reports on various bomb scares and evacuations, and requests for medical supplies for doctors at 'ground zero."

Northern NJ Hams Help

Amateur radio operators supported Red Cross operations at four shelters which were set up across the Hudson River in New Jersey to house New York residents who were unable to return home because of the restricted traffic into Manhattan. Many other operators relieved those on duty in New York City. Amateur radio replaced much of the Red Cross communications after its repeater was lost with the tower collapse. The nets were coordinating volunteer efforts and blood donations. In addition, they allowed hams in Red Cross emergency vehicles to keep in touch as they delivered cots, meals, and supplies.

Washington is Attacked

Within an hour after the World Trade Center towers were attacked, a third hijacked aircraft hit the Pentagon. Again amateurs were there to provide logistical support between the Salvation Army's relief and recovery effort on site and the agency's Arlington, Virginia headquarters. The Salvation Army provided food and refreshments to the crews engaged in the investigation and recovery operations.

Tom Harmon, AK1E, was at the Pentagon two days after the crash. "I did not get into the burned area, but walked through the parts of the building still functional. It was weird and abnormally quiet. *Lots* of armed folks walking around and no sense of humor. Plenty of checkpoints. There were two machine-gun nests I had to go through, just to get to the inner court." Harmon and others installed a repeater on his trailer that he left on site until the hams were released. By having the repeater on site, everyone was able to use very low power on their HTs and conserve battery power.

"There were mental health workers walking around yesterday looking into peoples' faces and eyes to see if they were past usefulness. Being tired leads to mistakes and also there is a slowly growing 'depression' on folks close in," said Harmon. "I still think it is a conflict of impressions. The awful depression from being there is offset by the incredible uplift of seeing so many volunteers and groups and their support." The well-being of volunteers was not the only thing being taxed. "I dropped a \$500 HT yesterday and someone ran over it," said Harmon. "A Red Cross worker handed me a dinner and I somehow got the soup into my shirt pocket and drowned another HT."

Impressions

While most of us were glued to the television set watching hour after hour of news, the volunteers on site did not get any news. "Somewhere around sunset last night we saw a line of trucks getting stuck behind a dirty auto wrecker up on Columbia Pike, just south of the Pentagon lot. The Pike is raised there, so everyone working there could see this. We heard a horn honk and our first impression was that he was blocking traffic. It took about a minute to realize that all the traffic was wreckers with lots of lights on and carrying American flags! It left a lasting impression in me and others to see those guys slowly circle the Pentagon as best as they could, allowing for the roads and security," said Harmon. "We were surprised to see candlelight vigils on street corners that had some grass. Lots of candles burning on the ground and people standing behind them with flags or wearing flags. Since we had no news of this, it was overpowering."

Western PA Hams Also Respond

While the television cameras focused on New York and Washington, hams in western Pennsylvania were also providing support to emergency management, the Salvation Army, and the Red Cross. There a plane crashed into an open field away from any populated area. The area was immediately declared a crime scene.

Amateurs were put on alert by local emergency management officials. Nets were activated on 2 and 75 meters. The Salvation Army's SATERN (Salvation Army Team Emergency Radio Network) team responded from Pittsburgh. By linking three repeaters together they had a direct radio connection from the Pittsburgh headquarters to the plane crash site some 80 miles away. Somerset County amateur radio operators assisted the SATERN team by shadowing key staff members. Liaison and communications were established by Salvation Army Team members with the Allegheny County (Pittsburgh) E.O.C. SATERN was the only established direct communications link from the Allegheny County EOC to the Somerset County area.

Support from amateur radio organizations around the world came into CQ. Andy, RW3AH, with the Russian Amateur Radio Emergency Service, who was in the Balkans wrote: "Dear AMERICAN friends: It was really terrible what happened yesterday in the USA... I believe that America will survive in this tragedy and will be stronger and solidarity! GOD BLESS YOU—AMERICA!"

Only the Beginning

The disaster response in New York is still going on. Amateurs are still providing vital communications. We have only begun to tell the story. Amateur radio operators responded from as far away as Georgia. Next month we'll continue our report on the amateur radio response to this Attack on America. We will take a look at training and some lessons learned about working in areas described as "war zones."

I want to thank Bill Sexton, N1IN; Ryan Jairam, AB2MH; Patrick Wilson, W4PW; Tom Harmon, AK1E; SATERN, and the ARRL for supplying information for this story.

73, Bob, WA3PZO

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