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Hamming it up

Amateur radio operators prepare for disaster

An operational mobile station

BY ADRIAN BOODAN

When a natural disaster occurs, it remains paramount that an effective channel of communication remain open at all times. Disasters such as hurricanes and earthquakes can tear down telephone and cable TV lines, topple cellphone towers, and destroy television and public radio communications towers. One of the most effective ways of staying in touch with authorities for help is by way of radio communications. For years amateur radio enthusiasts—also called HAM operators—across the globe have been involved in keeping communication channels open in times of disaster.

T&T is no different, says Eric Mackie, the president of the Emergency Communications Group of the T&T Amateur Radio Society (TTARS).

Mackie said the TTARS is a non-profit organisation that is always ready to assist in times of disaster. Citing recent examples, he said an effective line of communications was established among amateur radio operators when cell phones stopped functioning during a major tremor in the last quarter of 2006. Mackie said the TTARS also assisted emergency personnel in Grenada after hurricane Ivan tore apart that island and played a major role in setting up communications after the disaster.
In 2001, he said, he received a distress call from a yacht anchored off the coast of Venezuela. A boatman had been shot by pirates and was in trouble. Mackie said he co-ordinated a rescue exercise that involved the Venezuelan Guardia Nacional, T&T Coast Guard and the US Coast Guard.

In 2002 he was given the Golden Antenna Award in Germany by a joint Dutch-German organisation that looks at the humanitarian work done by amateur radio enthusiasts around the globe.

Getting an amateur radio license is a fairly easy exercise. TTARS runs classes in Port-of-Spain and San Fernando. These classes take place once weekly and run for one year beginning in September. The cost for the classes is just $400 since the association is not about making a profit. At the end of the course, participants sit a three-hour exam and upon successful completion, are issued a license and personal call sign by the telecommunications authority.

Equipment costs can start at $3,000 and reach up to $100,000 in some instances.

For the past five years amateur radio operators in T&T have been preparing themselves for disasters. From June 6-11, members of the TTARS’s Emergency Communications Group (Emcomms) headed to Plymouth Tobago its fifth emergency communications exercise. The exercise also saw personnel from the T&T Defence Force getting involved.

Mackie said: “Since the inception of Emcomms, the group has travelled to remote areas of T&T and set up communications equipment and established radio contact with other radio amateurs and disaster relief organisations both nationally, regionally and in some cases, internationally as would be done in a real emergency situation.

“The Emcomms exercise as it is known, is designed to simulate the living and working conditions as would occur in a real disaster scenario. Every year a location is selected and at the start of the hurricane season we travel to the selected site. These sites are usually in remote areas and have no running water or electricity. We then set up the communications tent and then a transceiver and antenna and get on the air, establishing preliminary contact with other Hams. Then the mess tent is set up, followed by the sleeping quarters. We then set up full radio and computer equipment in the communications tent and erect a portable 30-ft tower onto which we attach the various antennas needed for the exercise.”

Every piece of equipment that requires electrical power gets it either directly from 12 volt DC batteries, a 12 volt DC to 110V inverter or a 110V generator.

Mackie said: “We are entirely self-sufficient, as in a real situation there will be little if any, amenities available. “Radio amateurs are resourceful people and we train to make the best possible use of whatever is available to us. Beside having our own living and sleeping accommodation, we bring our own food and water and cook over open fires.”

Mackie said once the camp is ready, radio operators start the ball rolling. He said “We test radio propagation on various frequencies at various times of day, communicating with other amateurs both near and far. Communicating does not mean just speaking with a microphone.

“With the advent of the computer, many digital modes have been developed by Hams for Hams and we can send and receive e-mail or keyboard chat with others who may be on the other side of the planet. All of this is done
using a radio transceiver as the medium, rather than a telephone line.