

Amateur Radio in Cyclone "Aila" response

- By Ms.Yamini, VU2YAM

On the 25th of May 2009, a deep depression coiled over Bay of Bengal became Cyclonic formation "Aila" struck the coastal districts of West Bengal with wind speeds over 90 KMPH causing immense devastation in the region. The river banks breached at several locations as incessant rains caused river waters raise to unprecedented levels inundating farm lands, submerged houses in hundreds of villages resulting in hundreds of casualties and rendering millions of people homeless.



The road connection to several remote areas was cut off by "Aila" virtually creating Islands with no food, water, shelter and electricity for millions of people. The communication system to these remote villages was possible only when the cell phone towers were brought back into operation.

The Government of West Bengal sought assistance from Ham volunteers in the region to bridge the communication gap and for backup communications at remote locations. Mr. Ambarish Nag Biswas, VU3JFA and other Local Hams responded immediately by sending their members to North 24 Parganas District and South 24 Parganas District. The information on severity and scale of disaster started to trickle in as the local administration sent these teams on boats to remote areas to access the situation.



Mr. Ambarish Nag Biswas, VU3JFA operating amateur radio station at District Magistrate office Barasat.



The devastation unleashed by "Aila" cyclone deprived millions of people of their homes, leaving them a narrow stretch of land on high grounds or an elevated concrete road to survive. The trail of destruction is visible over vast area as sea of water as far as a human eye can see. The flood waters did not recede even two weeks after the onset of Aila. The situation demanded more Ham operators for efficient management of relief. The district administration requested further support of Ham volunteers with necessary equipment to assist their relief operations.

National Institute of Amateur Radio (NIAR), well known for its preparedness and committed team of volunteers immediately rushed its members to Kolkata, Capital city of West Bengal by train and flight to further reach Barasat, Headquarters of North 24 Parganas District on 1st June 2009. The District Administration dispatched the Ham teams to serve at administrative headquarters and other remote locations of Hingalgunj Block in North 24 Parganas district.

The team upon arrival met Mr. Srikumar Mukherjee, Hon'ble Minister for Civil Defense, Govt. of West Bengal which was coordinated by Mr. Arya Ghosh VU2GKB and Mr. Joy Chakravarthi VU3JCH. As per the advice of the government, an amateur radio station was established at the office of Controller of Civil Defense in Kolkata.

Later the station was shifted to District HQ at Barasat as normal telecommunication links between the District and State HQ were found adequate. The Amateur Radio station at Barasat remained as control station for all the other stations operating in this district which was tirelessly managed by the most experienced operator Ms. M.Bhanumathy, VU2BL. The stations checked on hourly basis to remain in regular contact for transfer of messages.



Ms. M.Bhanumathy, VU2BL & Ms. S.Yamini, VU2YAM operating at State Civil Defense HQ, Kolkata

Each Ham volunteer carried a suitcase containing HF Transceiver, VHF transceiver, 2 Hand-helds, Inverted 'V' antenna for 20/40M, VHF whip antenna, 100meters of coax cables, tools and other essential accessories all weighing over 30 kgs. The District Administration provided fully charged heavy duty 12V Batteries which was judiciously used to run the transceivers up to 5 days for uninterrupted communication at two remote locations. The Hams teams operated mostly on HF 40M - 7045 & 7070 KHz & on 20M - 14160 KHz and VHF 145.500 MHz.

The messages mostly were on requirement of relief material, administrative reports on disbursement of relief, reports on public health as well as situation reports of medical camps and movement of officials. Even as the mobile communications from private cell phone operators was partially restored, Amateur Radio communication was asked to remain as backup communication as information received by administration included new weather warnings and raise in river water currents on account of High Tides.

The remote locations in India are known to lack basic amenities and sanitation. Survival of millions of people in these areas is on bare minimum requirement of food, water and shelter. The homes of the people living in these parts of rural India are made of mud walls with roof made of hay stacks. The villages in remote areas had no electricity but used solar power and generators. Reaching the locations of operation at Block HQ was the first task, not familiar with the region or local language, part of the journey was on road, later men and material were shifted to small raft to cross a river and then one hour ride on a motorized tri-cycle. It took nearly 8 hours to travel 75 kms distance and reaching final destinations was just another challenge for the team.

Ms. S. Yamini VU2YAM, well known ham (recently her name included in Limca Book of Records 2009) was operating the amateur radio station at Block Headquarters office at Hingalgunj. Electricity was partially restored when we arrived at this location and a backup generator was in place as this was administrative control for the division. HF and VHF station were installed for round-the-clock operation. This location just the right place assigned for an individual female team member to work round the clock operation. The first signs of severe devastation were visible.

Hingalgunj Block was among the most devastated areas in North 24 Parganas District with over 28,000 families and 126,000 people affected by Aila, over 57 kms of river embankments breached causing maximum damage. The District Administration and over 300 volunteers from various agencies worked in managing relief effort at this block including NIAR, ICDS, Departments of Health, Land & Agriculture, NDRF, Army medical teams, UNICEF and other NGOs. The material supplied include Rice, Dal, Chira, Drinking water, mosquito nets, medicines, bleaching powder, firewood and medical supplies etc.,



Ms. Yamini, VU2YAM at Hingalgunj



The National Disaster Response Force, an efficient professional team with manpower and resources specially designated for Disaster Preparedness and Response in the country brought us to the shores of Jogeshgunj and Kalitala which were nearly 30 Kms from Block HQ on separate rafts, a journey that took nearly 2 hours on a curvy river overflowing with flood waters. The cruise goes along the river which is only 100 meters wide at most places that separate India and Bangladesh. A local guide is assigned to each raft to identify the villages in Indian Territory and also to avoid unwarranted landing on the shores of neighboring country.

Jogeshganj Panchayat with four villages viz, Jogeshganj, Patghara, Madhavkati, Hemnagar which virtually became an island, with over 90% of 5282 families severely affected as their homes were completely washed away. The livelihoods of many people depend on agriculture and fishing, many families have left this area or shifted to safer locations or moved to other places in the state to live with friends and families elsewhere. A HF/VHF station was set up at this location operated by Mohan, VU2MYH.



Mr. Mohan, VU2MYH at Jogeshgunj



Mr. Jose Jacob, VU2JOS at Kalitala

Kalitala Panchayat consists of 3 Villages viz Kalitala, Shamson Nagar and Pargonti, located on an island on the South Eastern tip of North 24 Parganas District adjacent to Sundarban Tiger Reserve Forest has population of nearly 21,000. People stayed in temporary shelters on elevated road. Relief material is brought through river from Hingalganj Block Office and other places and distributed by Panchayath and other NGOs on a daily basis. A Community kitchen is operating near Panchayath office. The medical camp reported many cases of diarrhea. Kalitala was among the farthest village from the Block HQ. Jose Jacob, VU2JOS, handled Ham Radio messages on HF /

VHF from there requesting drinking water; food, shelter, medicines etc. On 7th June 09, there was an alert for severe high tide in the area. Fortunately, the high tide did not rise to any danger level. The Station worked on 12V battery as this village has no electricity.

Several Ham volunteers from Kolkata and other places were also involved in the Aila relief communications some of them to positions in other affected locations Viz. Mr.Subhadeep Chatterjee VU2CSB, Mr. Satyarup Mandal VU3SCM, Mr. Swapan Dhara VU3SJR in Sandeshkali, Mr. Parag Ranjan VU3RUO in Dhulduli, and Mr. Anupam Biswas VU3BIS in Dhamakali of North 24 Paraganas District. Mr. Tanmay Chakraborty VU3SQY, Mr. Tapas Chakraborty VU2TKC, Mr.Anand Bose VU2AMB and other members of Indian Wave of



L to R: Sunil-VU2SYD, Deepak-VU3PHH, Jyoti Chakravarthy - VU3BGI, Yamini-VU2YAM, Bhanu-VU2BL, Jos Jacob -VU2JOS

Amateur Radio operated the HF 20M MFJ QRP donated by QRP-ARCI from Goshaba in South 24 Paraganas District. Mr. Sunil VU2SYD, Mr. Subhash Chandra VU3SUY and Hams from other states and regions like VU2NRO / VU3LMS & VU2JMA from NIAR HQ in Hyderabad and Mr.Sangeet VU2CEO were on standby for relay of messages.



LtoR:Bhanu-VU2BL, Yamini-VU2YAM meet with IWAR members Tanmoy-VU3SQY, Nilendu Ghosh -VU3PFX, Deepak-VU3PHH, Tapas Chakraborty- VU2TKC,

Agencies conducting Aila relief activities including Govt. of West Bengal appreciated the dedicated service of amateur radio and Ham volunteers as our teams returned to their bases on 11th June.

On behalf of National Institute of Amateur Radio, I wish to thank District Administration and Government of West Bengal and particularly Hams from West Bengal for their tremendous support the activity.