

How HERO did it.

PHILIPPINE AMATEUR RADIO ASSOCIATION



HAM EMERGENCY RADIO OPERATIONS

Now it can be told. HERO is the Ham Emergency Radio Operations formally launched upon the unveiling of the logo design contest winner during the 82nd Anniversary of the Philippine Amateur Radio Association (PARA) Inc. – the Philippine national association for the amateur radio service.

Preparations

HERO was activated on December 4, 2015 when it became imminent that typhoon Hagupit (local name Ruby) will make landfall somewhere in the Visayas region. It was to be a live test for HERO with Super Typhoon Yolanda in mind.

Upon its activation, a lot of traffic was devoted to trying to muster hams on the 40-meter band (the PARA center of frequency on 40 meter is at 7.095 MHz). Members were advised to start building up on their redundant power supplies such as generators, solar panels, batteries and other imaginable means available as power sources. Owing to the large swathe of typhoon Ruby, it was expected to be almost like Haiyan/Yolanda. There were striking similarities. Initially, Districts 4, 5 and 9 as well as Districts 6, 7 and 8 were alerted.



Both Ruby and Yolanda came from the lower quadrant of the typhoon belt. Both were packing winds more than 200 kph near the center. Both had huge footprint or diameter, with Ruby estimated to be around 600 kilometers. Both were expected to generate 3 to 6 meters storm surges and were definitely considered dangerous to lives and properties.

Government was not leaving anything to chance and there were plans to forcibly evacuate people along the typhoon track especially those in the coastal area. Ham operators were not

also leaving anything to chance. Lester Price DV5PO in Borongan, Eastern Samar was told the whole of their barangay were to evacuate. He made sure his equipment was secured – he packed them in watertight fashion and set about packing precious belongings he would be bringing along in the evacuation to a friend's house. Nathan Eamiguel, DU5AOK/9, stationed as a government executive in Davao City, was talking to his ham family (the wife Vilma is DV5VIE, and the kids are all licensed operators) and co-members by cellphone and was advising his local club RADNET5/DX5RAN how best to prepare for the coming onslaught of Ruby. ACCESS 5 Leyte and Samar members prepared well ahead. If the weather bureau – PAG-ASA – had made the correct forecasts, Ruby would make landfall in Borongan cutting across Tacloban, traversing the northern part of central Visayas and exiting through north of Palawan. This essentially would place much of the archipelago under the typhoon's mercy, even Metro Manila would not be spared because of its large coverage.

And so the waiting started. HERO consolidated its network. Checking in on the emergency nets were the following stations aside from Jojo Vicencio, DU1VHY; Romy Isidro, DU1SMQ; and Thelma Pascua, DU1IVT who served as net control stations:

- a. NORAD – 7 in Dumaguete City with station callsign DX7NRD, established their own Negros Oriental Operations Center
- b. SCAN International with callsign DX1EVM in Quezon City monitored the situation intently on 40m and 2m
- c. Upon request of the National Telecommunications Commission's Deputy Commissioner, PARA provided personnel from ACER/DX1ER and equipment in order to activate DX1NTC at the NTC office in Quezon City. Other NTC regional offices were also activated and manned by hams as listed below.
- d. ACCESS 5, Inc. members 4F5JMS, 4F5MM and others manned OCD Command Center in Tacloban City
- e. Dulce DU4UW facilitated the activation of the NTC Regional Office V in Legaspi City.
- f. After setting up the NTC station, Dulce DU4UW was on hand at his Sorgogon City QTH
- g. PARA affiliate club DX4CN, with 4F4PA Perry and others, was manning the Municipal Disaster and Risk Reduction Council (MDRRMC) in Daet, Camarines Norte
- h. Director Monroy of NTC Iloilo activated DV6NTC in Iloilo City.
- i. Director Zabala of NTC Region 8
- j. Alex DU3AL (who is the OIC of District 3) together with DU3DYG and Engr. Wilson Legarde responded by activating NTC Region 3 in Pampanga as NatelCom 3
- k. Rick DV6RCC was handling communications at the Office of Civil Defense 8 in Capiz
- l. Bobby DU6BG with Ned DU6NE (who is also PARA District 6 Manager) and Panay Amateur Radio Club (PARC) members were on standby in Iloilo
- m. Lito DU4DF in Naga, Camarines Sur
- n. Gil 4F2KWT in La Union
- o. Nanding DW5OCF in Ormoc City

- p. Arnel DV6WAV and Iver DV6ILA in Roxas City PDRRC
- q. Ton DW1QGG in Marinduque
- r. Tony DV6WAJ/QRP in Iloilo
- s. Ditoy DW1OZR in Pinamalayan, Or. Mindoro
- t. Fr. Jobo DW1VWU in Baco, Or. Mindoro
- u. CARL members and DV7JAY in Cebu
- v. Ivan DV7DRP (one of the Net Control Stations of the DU Net) and DW7DTC Jeru along with other DX7EVM members in Vallehermoso, Negros Oriental were embedded with their Municipal DRRMC.
- w. Nathan DU5AOK/9 in Davao
- x. Fr. Dan DU1SXW in Lucban, Quezon
- y. Engr. Seno 4F5TDS of MAGMA manned NTC Maasin City
- z. ROYAL members in CDO
- aa. Jolly DU1JQ for PNP Southern Luzon

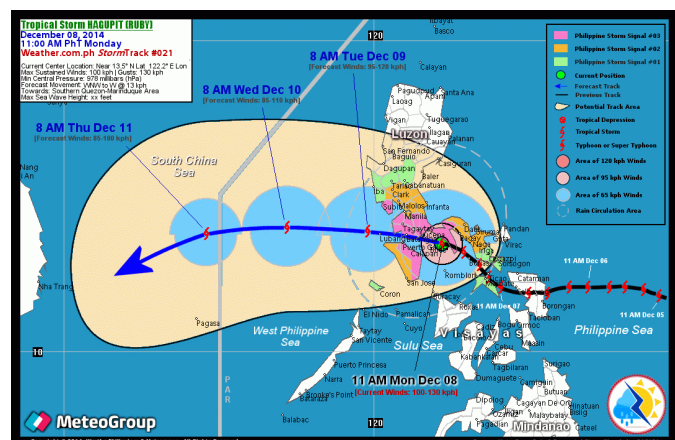
Days ahead of the projected landfall area forecast, one of the first groups of hams who have prepared are from the District 9, in coordination with Eric 4F9AM and Kaye DU9XO (the PARA DU9 Manager) and the ever supportive Regional NTC Director, Engr. Ted Buenavista.

It was a good mix of stations along the typhoon path and it was felt that HERO had a good chance to perform well under stress. The DU nets conducted twice a day also saw a marked increase in stations checking into the net – they were averaging around 120 local stations. Twice, the 2:00pm propagation check put to test the reception capabilities of everyone.

Landfall

The actual path of the typhoon is shown from a screen grab from the MeteoGroup website.

On the early evening of December 6, 2014, PAG-ASA updated its weather bulletin on Ruby's landfall. Ruby shifted upwards and was expected to make landfall in Dolores town which is some 40 kilometers north of Borongan City. Government resources were frantically being re-positioned and PARA had no HERO operator in that town. Lester, DV5PO, is from Borongan and it was felt that he was the ideal HERO operator – he has tons of experience in DXing, a lifetime of technical knowledge and an expert homebrewing and ideally located. But typhoons are fickle.



As Ruby traversed Eastern Visayas, it became clear that HERO stations worked perfectly. At projected movement hours, HERO stations would call out the local conditions. Mr. Jonathan Baldo, Municipal Disaster Risk Reduction Officer of LGU-Catarman, Northern Samar, adopting the callsign of “Tiger” is a non-Ham station who participated in the efforts of HERO from the local government unit office of Catarman City, Northern Samar and even persisted in describing the storm as it was whipping its fury, but it became clear soon his station position was exposed to danger and ceased transmission.

On December 6, 2014, Christopher Firmo DW5WXZ, along with DY5JYN, both members of RADNET5/DX5RAN responded to a helicopter making an emergency landing in a clearing in Burauen town, Leyte. The pilot said their aircraft was buffeted by strong winds and was almost pummeled to the ground so they had to make an emergency landing. Christopher radioed for assistance to Burauen Operations Center, along with requests for transport and security. At the time, the information was posted on FaceBook, the foreigner passengers – a CNN reporter and 2 Japanese journalists attached to the United Nations – travelled safely to Tacloban. The helicopter turned around and went back to Cebu.

See related link <http://edition.cnn.com/2014/12/07/world/asia/philippines-stevens-manila-to-tacloban/>

On December 7, 2014, active Tacloban stations from ACCESS 5/DX5LYM and RADNET5/DX5RAN were on reestablished communications. VHF stations were alive at this point and the HF station in the Tacloban City Hall operations center manned by Vilma DV5VIE came alive. She served as a link between the PARA and their local Club, RADNET5/DX5RAN, whose members were assisting the Tacloban City Risk Reduction and Mitigation Office Operation Center in its preparation and assessment efforts. Damage assessment by ACCESS-5 accompanying OCD in making its rounds began.

From December 7 to 8, 2014, HERO net controls DU1VHY, DU1SMQ and DU1IVT had their hands full of traffic emerging out of Tacloban and other localities along the typhoon path.



Most of the messages were public service advisories about the damages and which major routes were passable. Clearing operations were ongoing and it was clear that there were passable routes to Eastern Samar from Tacloban.

ACCESS 5 had to embed its operatives for the OCD teams going to Borongan, Eastern Samar. ACCESS 5 has OCD as its served agency and its operators were expected to man the communications equipment of OCD and even providing some of their own equipment. From then on, continuous updates were on air directed to the Tacloban Command Center.

In the meantime, Lester DV5PO, upon return to his residence in Borongan also attended to the activation of the Don Bosco Youth Center. He tested the equipment which successfully established contact with Don Bosco Cebu being manned by Father Brian, DW1WRB/7 .

On December 9, RADNET5/DX5RAN on the other hand decided to send a team led by its Club President Ronald Madera DW5NLH to Dolores town of Eastern Samar– the site of the first landfall of typhoon Ruby - to handle outbound messages because there was no electricity for the whole of the Eastern Samar province and also no cellular phone signals. With Ronald were Boboy Ladios, Alex DW5LEX, Benjamin Pedrosa and Rod Caceres. As narrated by Ronald DW5NLH later, they took off to Dolores in the afternoon of December 9, 2014. Half-way through the trip, they encountered a collapsed bridge – the San Julian bridge – and had to detour via the Paranas route which meant they had to go back near the San Juanico area, go to the direction of Western Samar, then make a left turn in Buray, Paranas, Samar, towards Eastern Samar. Their trip meant they lost so much time that they arrived in Dolores just before 1:00 a.m. – the first hour of December 10, 2014.

They immediately set up the HF radio station and began to activate Dolores at the municipal gym with Nathan, DU5AOK/9 guiding the team on how to optimize their station’s usefulness and the operating procedures for such an effort, having manned the famous DU5AOK station in Tacloban in last year’s Yolanda operations. The Municipal Mayor of Dolores who got wind up of the operations of RADNET5/DX5RAN at the Municipal Gymnasium then invited Ronald and his team to transfer to the Municipal Building for security reasons.

The welfare messages were received by HERO stations Jojo DU1VHY, Gil 4F2KWT, Thelma DU1IVT, Romy DU1SMQ, Ramon DU1UGZ, Nathan DU5AOK/9 and Bert DU8BTZ. The parameters of the operations was similar to that of Yolanda’s – only outbound messages from Dolores were to be transmitted, receiving stations process the messages on a voluntary basis and replies from intended recipients can only be transmitted and made known to the original sender if he or she was still at the vicinity of the operating station. It must be noted that not all messages were intended for local recipients, there were some which were for abroad and that overseas calls and texts had to be completed.



More than a hundred messages were passed on to HERO stations in less than 17 hours and the rest were brought back to Tacloban by the team, totaling to 307 messages served. Most of the messages were to inform the recipients that they survived from the storm but their houses or structures suffered damage or were totally destroyed. Most of the recipients

thanked the efforts done by HERO stations, while one recipient posted on her Facebook account her gratitude.

Meanwhile, ACCESS 5 volunteers embedded with OCD or municipality operation centers were giving SitReps (Situation Reports) from the different localities. Jerick 4F5JMS would break into the emergency net to give latest updates on roads affected, casualties, latest developments on clearing operations and other matters that had bearing with recovery operations. Also worth mentioning is their coordination with their northern Samar members in Catarman, like Engr. Rey DW5AXK, who with the rest of other ACCESS 5 members were able to set up their VHF antennas 2 days after. Capt Rick Catungal DV6RCC also continued to share the SitReps in Region 6. Jay DV7JAY continued to send the SitReps from the PDRRMC of Cebu, adding all roads to the northern part of Cebu were passable.

On the other hand, the Emergency Response Team of EVRMC proceeded to Borongan, Eastern Samar, to assist in providing health and medical services. Ham operators cum health personnel were among those who joined the team – Dr. Liezel Ruetas DW5LRY, Engr. Jose Bong Jocano DW5JMJ, the PARA District 5 Manager, Feliciano Nicolas Jr. DW5FJN, Julius Ebal and Tintin Rubillos (all members of DX5RAN/RADNET5). Dr. Ethel SM. Eamiguel (the physician who provided assistance in setting up the makeshift radio station of DX5RAN/RADNET5 during ST Yolanda) was also with the team. The EVRMC ERT was divided into three teams: Team A: Eastern Samar Provincial Hospital, Borongan. Main Task: To relieve the doctors, including the Chief of Hospital for 48 hours (straight duty) to give them enough time to check on their families. Team B: Taft District Hospital. Main task: Make the Hospital fully functional since it was the worst hit facility by Typhoon Ruby. The team stayed there for 72 hours straight. Team C: Mobile Team for the rest of the affected areas

Oras, Dolores, Can-avid, Sulat, all of Eastern Samar. Main Task: To Distribute Medical Surgical Logistics to their RHUs and Local Hospitals and show them that EVRMC is with them.

Everything heard on HERO was being logged by DX1NTC. ACER/DX1ER made sure that DX1NTC had enough operators. There were more than 10 operators from December 5 to December 10, 2014, mainly Raul DU1VFS, Miguel DW1VJD, Conrad DU1TGD, Lito DU1PA, Ron DV1RX, Eugene DV1VNP and Nards DU1LC with great support of logistics from their group. Any operator seated on either HF or VHF transceivers were logging the HERO reports heard 24 hours each day.

On December 8, the PARA District 1 Manager, Romy DU1SMQ, decided to conduct the 2-meter HERO net at 8:00PM while Ruby was expected to affect the Southern Tagalog area, and other District 1 areas. There were around 85 stations from District 1 and neighboring District 3 who joined.

Winding Down

The last SitReps and other useful information came from Mindoro operators. Ditoy DW1OZR is in Pinamalayan, Oriental Mindoro. He was in coordination with their local disaster committee and his updates on Ruby before and as it was passing through Mindoro and the minimal damage it caused gave HERO useful information. Fr. Jobo is DW1VWU located in Baco, Oriental Mindoro. He is a parish priest and his messages on the progress of the evacuation efforts were very helpful. PARA is proud to have at least four (4) priests who were active during the operations, including Father Dan DU1SXW of Quezon regularly reporting.

By December 12, as HERO was secured, Jerick Silva 4F5JMS, President of ACCESS 5, had notified PARA 2014 FB page that there were cellular phone signals now in Eastern Samar and they were pulling out their stations. He said he has instructed Nelson DW5MGB and Edgar DW5EST to disengage from Borongan. He also said that their station in Tacloban will also deactivate from its served agency. He also provided SitRep from Region 8 mentioning that 359 barangays were affected consisting of 160,211 families which translated to 763,314 individuals.

Capt. Rick Catungal, DV6RCC reported on 11th Dec that 1,111 barangays with 88,526 families were affected numbering 349,267 individuals.

Even heroes reflect

There are a lot of lessons learned as there are realizations during the five (5) days of HERO. Among these are:

1. There is a need for a more structured HERO hierarchy. The PARA Board should make a policy decision in this regard. The NTS Chairman is aware of this.
2. HERO needs to develop its Standard Operating Procedures (SOP) and protocols. Perhaps a HERO summit can snowball these needs.
3. Operators lack equipment. Many of our HERO volunteers cannot afford the equipment that first world responders consider basic. HERO needs an enabling program.
4. HERO needs more operators. Year in and year out, these natural phenomenon occur. The more operators we have in the Eastern Seaboard and throughout the archipelago, the better chances of success for HERO to provide public service.
5. Practice makes perfect. HERO needs to be populated by operators who are trained and skilled in emergency communications – from the basic operating procedures to the minimum technical skills on setting up emergency field stations. All must know the basics of antenna making and HF operation.
6. The HERO activation relies on the leadership of PARA. There is a need to design the HERO structure as cell type networks in the different call districts. The local HERO networks can be made operational to respond to local disasters and in the extreme, take over the harnesses of the national HERO network should it be needed e.g. Metro Manila is the affected area.

Most stations not affected by the typhoon may not have been heard actively on HF except during 7am and 7pm net times on air but chose to cooperate by monitoring to get updated as often as possible and relayed traffic by other means to help the HERO. To listen is a great tool in learning what to do when the time comes the location of the usual net control stations would suffer from any disaster in the future, heaven forbid.

Lessons are learned in every emergency encountered. This makes DU HERO stations become more aware and better prepared. Different colors, different situations, different approach there may be, resiliency is an understatement. We persist, no matter what.

From the HERO Desk

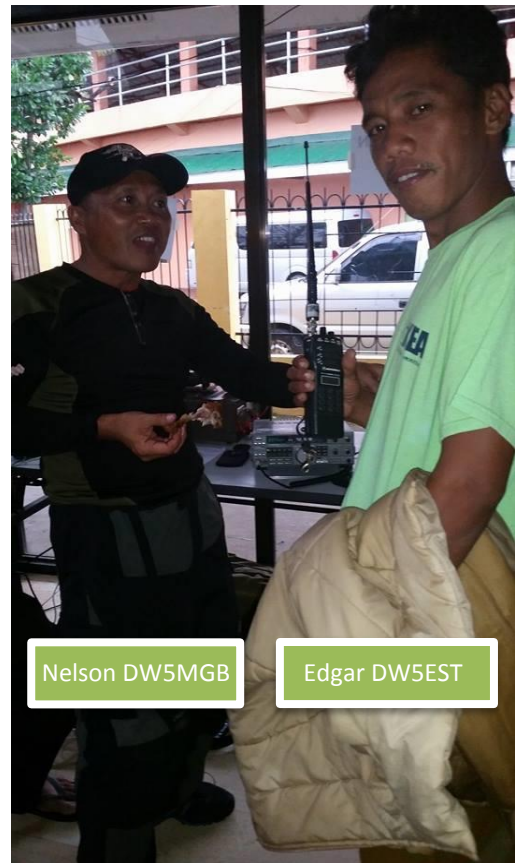
Contributors: 4F2KWT, DU1IVT, DU1VHY, 4F5JMS, DU5AOK

Contributing Editor: DU1UGZ

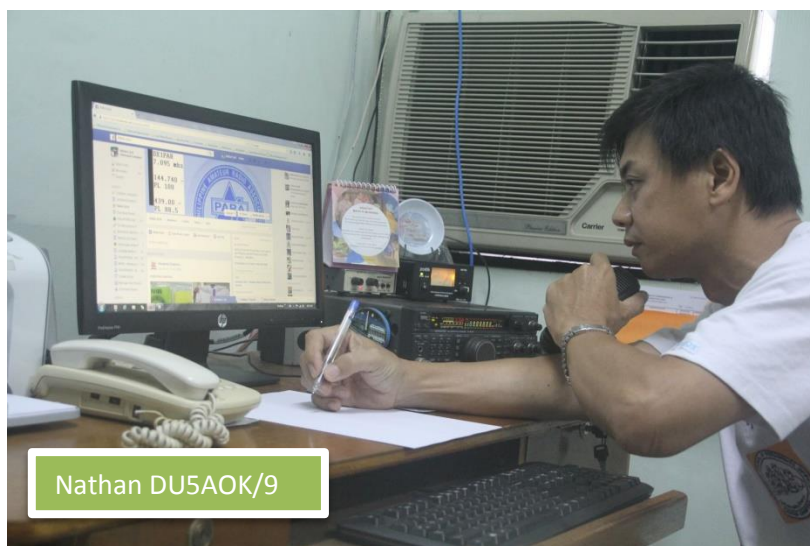
Photos courtesy of the participating HERO stations, except when cited.

HERO PHOTO RECORDS









Nathan DU5AOK/9



Vilma DV5VIE



Ronald DW5NLH
Alex DW5LEX
Buboy DW5BRO

RADNET 5 @ Dolores

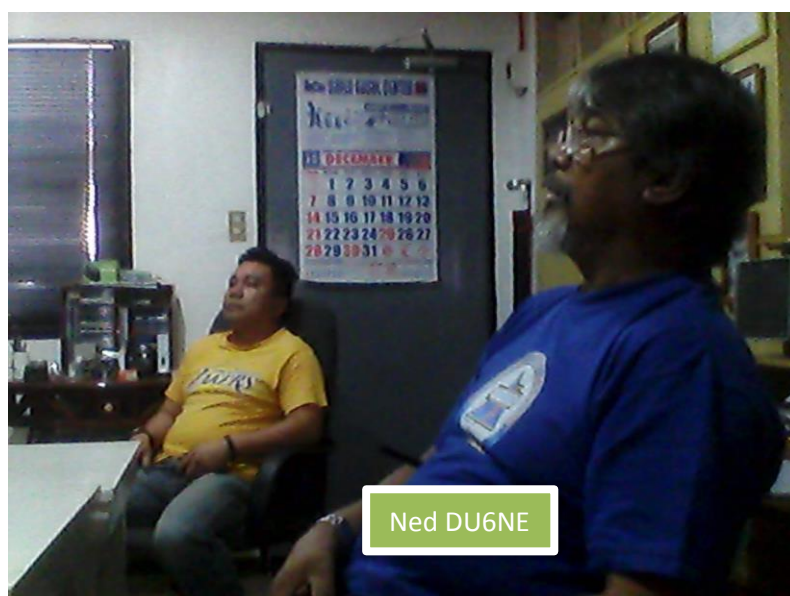
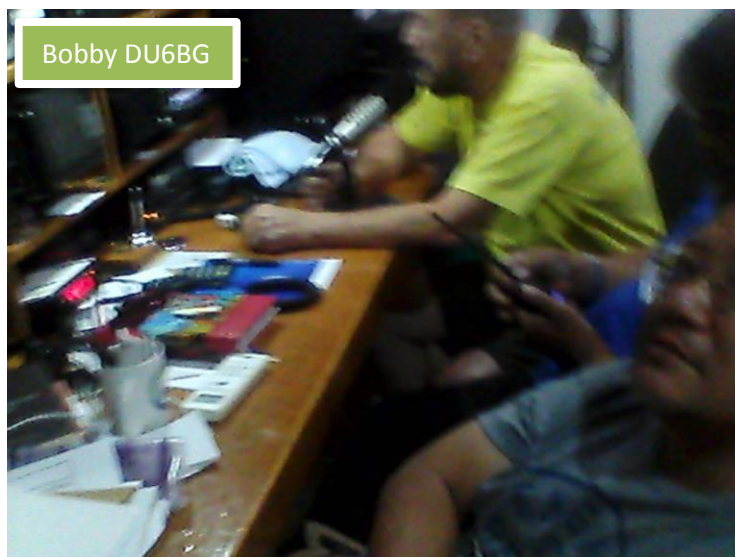


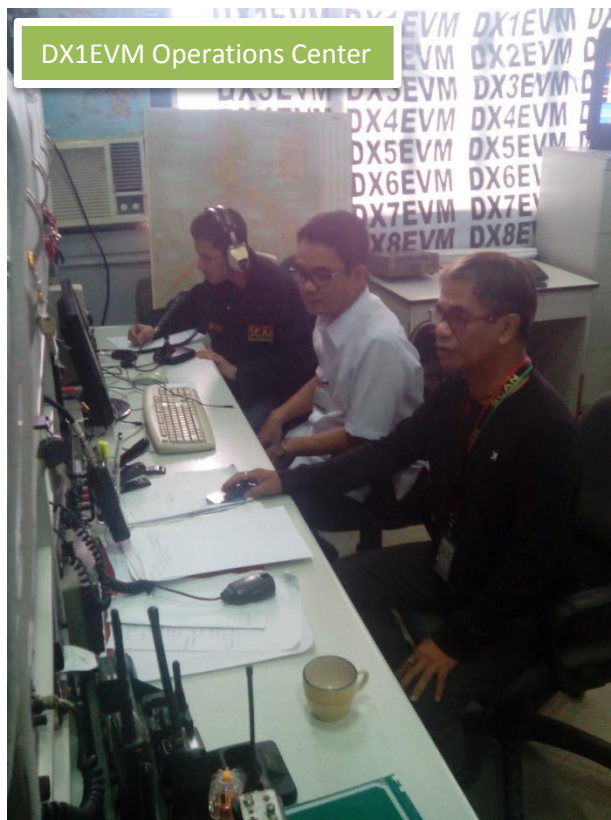
RADNET 5 Genset



RADNET 5 Help Desk @ Dolores Gym



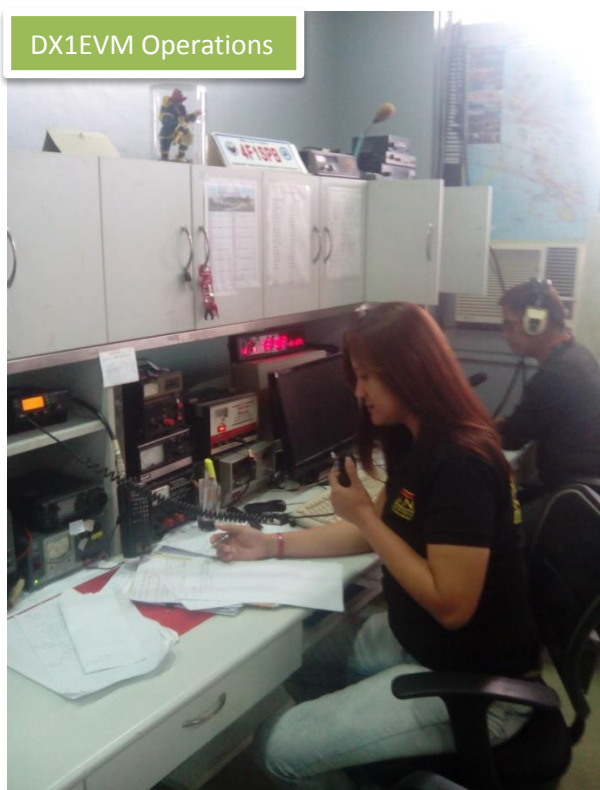




DX1EVM Operations Center



Dario DU1SFZ Operating @ DX1EVM



DX1EVM Operations



Lester DV5PO & XYL



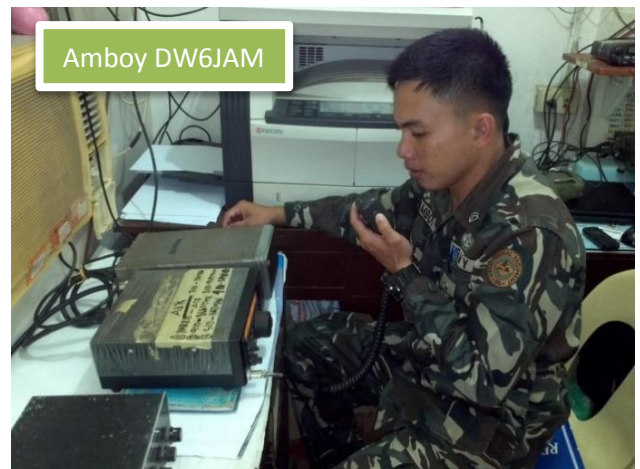
Arnel DV6WAV & Iver DV6ILA



Rick DV6RCC



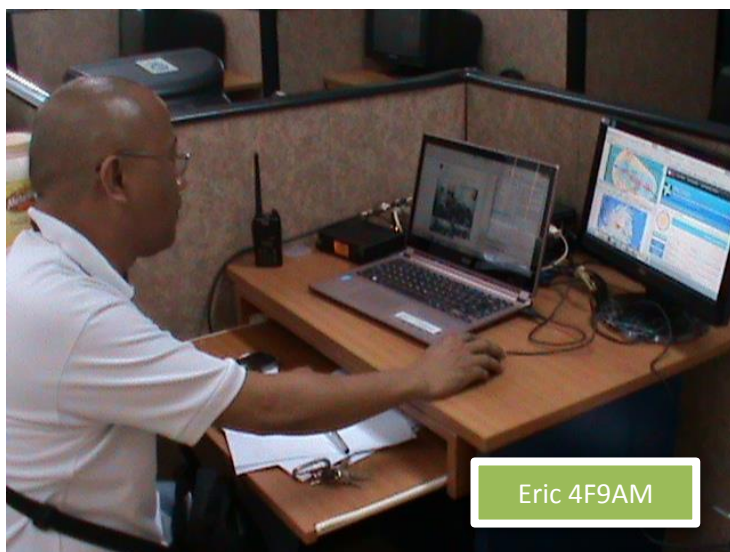
Amboy DW6JAM







(R-L) Sitting on bench are DY6XAL, DU6PEW, DY6VAY
operating from San Carlos City DRRMO



Eric 4F9AM



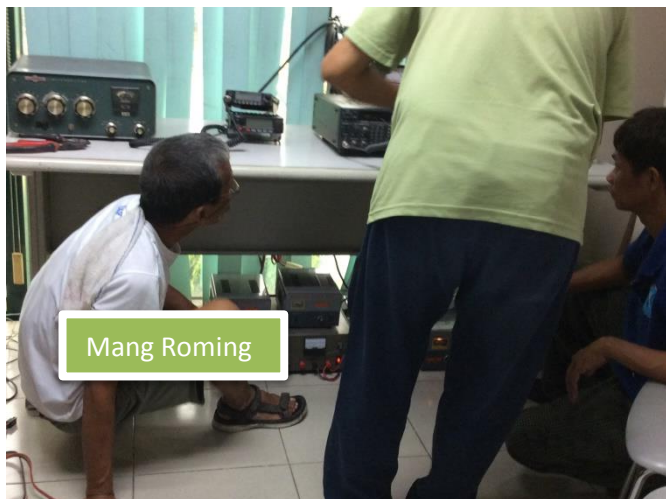
Nilo DV9WSM and DW9WYE @ Oroquieta PDRMC Misamis Occidental

12.04.2014 09:45









Mang Roming



Gilbert DU1GG



Ditoy DW1OZR

© Copyright Philippine Amateur Radio Association (PARA) Inc., 2014
 No portion/s of this work may be reproduced or republished without express permission from the author.
 The HERO logo is a property of PARA.