



VoIP Hurricane Net News

September 2007

Your monthly update about the VoIP Hurricane Net !!

Volume1, Issue 1

- Welcome
- Don't forget our Saturday Night Prep Net !!
- If you would like to submit an article, send them to me at kf6bka@voipwx.net by the 25th of each month

Inside this issue:

GAREC -07	2
Hurricane of the Month	4
News From the NHC	4
Technical Tips and Tricks	4
NOAA, NASA Announcement	5
Ham Radio Operators Essential	5
Station Profile	6
Q+A	6
Weather And Radio On The Net	6

From the Editor

Welcome to the first edition of the VoIP Hurricane Net's monthly news! The purpose of this letter is to keep you informed about net activities, activations, and what the management team is doing behind the scenes to continually improve our net and provide the highest quality information to the hurricane center that we can. This is my second year with the net and I have learned a lot about what happens behind the scenes to make all of this happen and to bring together so many people in a time of need to help their fellow man. I really feel the need for their stories to be told to you and I hope this newsletter will bring each and everyone of you to the table with ideas and suggestions. The management team is very open to new ideas. I know, I'm used to telling them what I think and even when I'm

wrong they always treat me with respect and take the time to explain why. So, I encourage you to contact our Operations Manager Rob, kd1cy, or any other members of the team and give them all of your new ideas.

In this column I will try to answer your questions about the publication and give you a perspective from the Net Control's point of view. I want to encourage each and every one of you to please submit articles to me. These can be about tropical weather, technical tips and tricks, or any other VoIP related issues. My goal is to make this a well rounded publication that will inform you about the latest news but also give you insight to the VoIP and weather worlds. One section that I am proud to present to you is called Hurricane of the Month. This will be a look at

hurricanes that made history. This month is a write up about the Galveston storm of 1900.

Please remember that this is **YOUR** publication and I need **YOU** to help keep it running. I need articles, ideas, and yes even criticism to make this a better publication to serve you !

Rich Long, kf6bka, kf6bka@voipwx.net

Hurricane Dean Makes Landfall

Hurricane Dean made landfall near Costa Maya or Majahual at 3:30 AM Central Daylight Time Tuesday, as a potentially catastrophic Category 5 hurricane. Earlier in the week, the storm slammed Jamaica as the eye passed within 50 miles of the South Coast of Jamaica as a Category 4 hurricane.

"We received numerous reports of estimated winds over 100 MPH in Corozal, Belize, with roofs off homes, power, electricity and phone service out in many areas. Similar damage was reported in Chetmual, Mexico from a relay from Connie, NH7IE, from a friend who lives

in Chetmual, Mexico," said Rob Macedo, KD1CY, Director of Operations of the VoIP Hurricane Net.

WX4NHC Assistant National Hurricane Center Amateur Radio Station Coordinator, Julio Ripoll, WD4R, has been working to get reports via the VoIP Hurricane Net and liaison has been established with Spanish speaking Mexican stations on the XE2MCC EchoLink conference node: 255469. Julio has been receiving reports directly from that conference via Spanish, and NP30D, Francisco Diaz-Gonzalez, from the VoIP Hurricane Net Control team, is

monitoring that conference for reports.

"We've also received reports of trees down, power outages from the Telum and Campeche, Mexico, area as relayed via the XE2MCC conference and from other Amateurs," Macedo said.

A report of 16 fishermen being stranded in the Middle Keys on Jamaica was confirmed by 9Z4FZ, Julien Deider from Trinidad, by making contact with the Trinidad Coast Guard who then verified the report with the Jamaican Coast Guard. All 16 fishermen took shelter in a
-Continued on pg. 3

VoIP Hurricane Net Management Team Presents at GAREC-07 in Huntsville

On Thursday August 18th, 2007 the net management team made its first international presentation at the Global Amateur Radio Emergency Communications Conference (GAREC-07). Myself and Dennis Dura, K2DCD, attended the conference's first ever U.S. visit. Dennis made an excellent presentation about the net and all the work we do. He also urged attendees from the Caribbean and Central American to check in to give us reports and to act as translators. The following excerpts are from the ARRL Website:

The third event of its kind, and the first ever held in the United States, the Global Amateur Radio Emergency Communications Conference (GAREC-07) took place August 16-17 in Huntsville, Alabama, just prior to the 2007 ARRL National Convention and Huntsville Hamfest.

Almost 100 people from all over the world came to Huntsville, making this truly a global event. GAREC's prevailing theme, how to apply advanced technologies to emergency communications, was echoed throughout the two-day event. From presentations to discussion groups to emergency vehicle displays to information about the latest in hardware, GAREC attendees had a sampling of just about everything pertaining to the Emergency Communications arena.

[Dennis] Dura presented the topic of using VoIP, EchoLink and IRLP for establishing and maintaining communications during hurricanes. The session discussed the methods of combining RF links to the internet to establish a cohesive network. The VoIP Hurricane Net is another tool that Amateur Radio operators, the National Weather Service, the National Hurricane Center and emergency managers use to gather detailed information on local conditions.

Conference Recommendations

While GAREC is not a decision-making body, its ideas and proposals will be submitted to the IARU to be included for discussion at their next Administrative Council meeting, scheduled for June 2008. These ideas may also be discussed at each of the three IARU Regions' upcoming meetings.

The conference made the recommendation to introduce the call sign suffix "/D." This suffix would be used by those in the Amateur Radio Service who handle traffic related to emergency and disaster situations. According to Pitts, this recommendation, made by Willem Visch, PG9W, would let anyone listening immediately know there was emergency traffic and lessen the chances of someone unintentionally breaking in on an emergency net.

Another recommendation included the extension of "EmComm Party on-the-Air." These are Emergency Communications exercises already in place in Region 1. Seppo Sisatto, OH1VR, Region 1 representative, proposed holding two annual international drills, lasting only 4 hours, beginning November 11. This, he said, recognizes that major calamities can and do cross international borders, and hams need to practice for such times.

GAREC suggested that the IARU initiate studies in cooperation with its Member Societies and with specialized emergency communication groups. These studies would focus on the development and possible introduction of standard codes for use in international emergency communications, as well as on the need for the development of a list of standard resource types.

The conference announced its support of the IARU's Administrative Council decision to collect information from all Member Societies about the status of implementation and application of the revisions to Article 25 of the ITU Radio Regulations (RR) resulting from WRC-03. The part of Article 25 concerning Emergency Communications says "Amateur stations may be used for transmitting international communications on behalf of third parties only in case of emergencies or disaster relief. An administration may determine the applicability of this provision to amateur stations under its jurisdiction" (RR 25.3), and "Administrations are encouraged to take the necessary steps to allow amateur stations to prepare for and meet communication needs in support of disaster relief" (RR 25.9A).

GAREC appealed to all of the IARU Member Societies, as well as specialized emergency communications groups, encouraging the accession to and ratification of the Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Response Operations by their respective national authorities. The US has not yet ratified this document, but word was received during GAREC that Ireland announced their accession to Tampere. There are currently 37 countries that have adopted Tampere.

The conference also appealed to the IARU to "further encourage the development and the application of new modes and technologies in emergency communications," and to support the development of training aids. This includes the handbook on emergency communications, initiated by the 2005 and 2006 GAREC conferences, "and the development of a handout to inform the public, in particular during major conferences such as the forthcoming WRC-07, as already decided by the IARU Administrative Council in 2005." GAREC also asked the IARU to "continue its support to the continuation and further development of the GAREC concept and process."

Continued on pg. 3



Dennis Dura, K2DCD, gives presentation at GAREC-07

Hurricane Dean Makes Landfall - continued from pg. 1

Coast Guard building on the keys and were safe. Julien relayed numerous other damage, storm surge and wind estimate reports from Jamaica to the net. "Thanks for the update on the fishermen and were glad to know they are safe," said Julio Ripoll, WD4R, Assistant WX4NHC Coordinator.

Measured wind speeds were sustained between 100-105 MPH along the south coast of Jamaica from Lionel town to Kingston with gusts estimated as high as 130 MPH. Roofs were blown off numerous structures with many trees, phone and power poles down. Electricity, water and landline phone service was lost in many areas but cell service stayed up in most areas. Storm Surge flooding was significant along southern coastal areas.

Ray Weber, KA1JJM, from Western Massachusetts SKYWARN and Dave Taylor, KI4YIK, from Rock Hill, South Carolina, both were instrumental in relaying measured wind data reports. Ray had a contact in Lionel Town, Jamaica, who was a mariner, and Dave had a contact with a missionary in Jamaica

that had wind instrumentation that clocked sustained wind speeds.

"This is an example of gathering disaster intelligence information by all means possible which is a huge role for our net. If we don't have direct contact with the affected area, getting stations that can relay from other sources from both within the Amateur community and from other contacts that Amateurs may have in the area can be of great help," Macedo said. Between the *WX-TALK*/IRLP 9219 reflector system and the listen only conferences, there were over 150 connections from EchoLink PC users as well as EchoLink and IRLP links and repeaters where people that were interested in Dean's impact on Jamaica monitored. This included relief agencies that monitored which included the Salvation Army and the Southern Baptist Relief organization.

Hurricane Dean was expected to weaken over land on Tuesday but will then move out over the Southern Gulf of Mexico waters which are quite warm. Dean is expected to maintain

hurricane intensity and make his final landfall in main land Southeast Mexico on Wednesday potentially as a major hurricane. The VoIP Hurricane Net and WX4NHC expect to activate once again on Wednesday to support surface reports from stations in the affected area of Dean.

According to WX4NHC Assistant National Hurricane Center Amateur Radio station Coordinator Julio Ripoll, WD4R, "We had very poor HF conditions and the EchoLink and IRLP modes really shined and brought us the majority of the reports during Hurricane Dean."

The Mexican hams also have to be applauded for making the extra efforts of relaying information from 40 meters, VHF and other local communications to the VoIP Hurricane Net.

Hurricane Forecasters at the National Hurricane Center were very appreciative of all of the ham radio surface reports, as it helped them confirm data and the ground level and helped them visualize the human perspective. - arrl.org

GAREC-07 -From Pg 2

GAREC also asked Amateur Radio contest organizers to include a provision in their rules that contest participants avoid frequencies in the immediate vicinity of the Center of Activity frequencies (as proposed at GAREC-05); these frequencies are 14.300, 18.160 and 21.360 MHz. According to Pitts, "This would minimize interference to weak or distant stations which may be passing emergency traffic, but not

heard in the contest din." Region 2, of which the US is a part, has not adopted the Center of Activity frequencies, but they will be discussed at the next Region 2 meeting in Brazil next month.

-arrl.org



THE GALVESTON STORM OF 1900 — THE DEADLIEST DISASTER IN AMERICAN HISTORY

When we think of hurricanes today we automatically think the name Katrina, but in reality there were other names that taught us to respect the awesome power of the storms. This month we will discuss a storm with no name.

The dawn of the 20th century ushered in many dramatic changes in the United States. The Wright Brothers conducted flight experiments at Kittyhawk, North Carolina. The U.S. population was 76 million in 1900 compared to 270 million in the year 2000. And, the U.S. government took in \$567 million in 1900. At the end of the 20th century it took in \$1.7 trillion.

There were many memorable events in the United States throughout the 20th century. The Galveston, Texas, hurricane of 1900 remains the worst disaster in American history. More than 8,000 people perished September 8, 1900 when the category 4 hurricane barreled into Galveston, where many people were on vacation. In 1900 there were no weather satellites and no Doppler radar. However, warnings were issued by the U.S. Weather Bureau, the predecessor of NOAA's National Weather Service. People were advised to seek higher ground. Many didn't heed the warnings preferring instead to watch the huge waves. On September 8, the hurricane

slammed into Galveston almost head on. Waves were higher than 15 feet and winds howled at 130 miles per hour. By the time the storm passed, more than 8,000 people were dead, countless were injured and half of the island's homes had been swept away.

Read the report of Isaac Cline, the local forecast official with the U.S. Weather Bureau, who recounts the events of those days. He lost his wife when their home collapsed in the onslaught of the storm. Can this happen today? It's possible. Even though there have been great technological advances in weather forecasting the past 100 years and the city has erected an 18-foot

seawall, Galveston is not invincible to such powerful storms. Since many people in the United States have moved closer to the shore, trying to evacuate the population of Galveston could take days.

- Courtesy NOAA



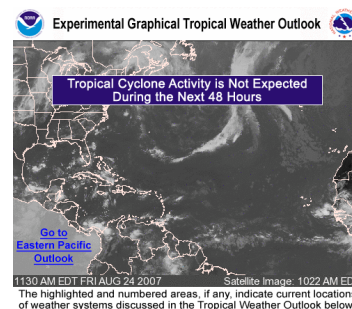
News from the NHC—Experimental Graphical Tropical Weather Outlook

The graphical Tropical Weather Outlook (TWO) is an **experimental** graphic that the National Hurricane Center (NHC) is testing and evaluating during the 2007 hurricane season. The experimental Graphical TWO is intended to be a visual companion product to the text TWO. The NHC intends to produce, experimentally during 2007, a graphical TWO twice daily in both the Atlantic and Pacific basins. However, due to the

experimental status of these products, the experimental graphic may not always be timely or even available. While the experimental graphical TWO is expected to be available shortly after the operational text TWO, the experimental graphic may take 30 minutes longer (or more) to update following the issuance of the official text TWO. Given its status as an experimental product, users should not rely solely on the

graphical TWO for important decisions. Rather, users are urged to continue using the operational text TWO during the 2007 season.

- NHC website



Technical Tips and Tricks by Rob KD1CY: Low and Hot Audio Issues

Hello to all...

During the weekly net, communications tests, and activations, we've noticed several items that we wanted to bring to the group's attention and give some tips on how to avoid these issues. This month I would like to focus on audio issues.

Many folks have had low or hot audio issues when using their

EchoLink PC or link. One way to get these audio issues adjusted via EchoLink is to go to the *ECHOTEST* conference server, Node #: 9999. This conference records your transmissions and plays them back to allow for adjustments to your transmit and receive audio. Use this system before checking into the net to assure your audio levels are proper. This

means peaking just into the yellow range when transmitting and viewing the EchoLink bar. For IRLP nodes, IRLP reflector channels 9990-9999 can be utilized for audio adjustments. Typically, most IRLP nodes have good audio so no adjustment is necessary.

NOAA, NASA ANNOUNCE GOES-R INSTRUMENT CONTRACT AWARD

NOAA and NASA today announced a \$92 million contract award with the Laboratory for Atmospheric and Space Physics at the University of Colorado at Boulder to design and develop the Extreme Ultra Violet and X-Ray Irradiance Sensors. These instruments will help forecast solar disturbances, and will fly on the next generation of geostationary satellites, known as GOES-R. The first satellite in the series is set to launch in December 2014.

The work on EXIS will be performed at the contractor's facility in Boulder. EXIS has two measurement features: an X-Ray sensor for monitoring the sun's flares and the Extreme Ultraviolet Sensors that monitor severe variations in the sun's light. Both solar flares and variations in sunlight can disrupt communications and navigational accuracy.

Once launched on GOES-R, scientists at NOAA's Space Environment Center, also in

Boulder, will be the primary users of the EXIS instruments. The SEC provides real-time monitoring, forecasting and warnings of solar and geophysical events and disturbances. Delivering EXIS is a key requirement of NOAA's space weather operations through GOES-R. "The EXIS will provide one of the most important observations for early warning of space weather events, and it is a key measurement for the Radio Blackout Space Weather Scale," said SEC Director Tom Bogdan. "This sensor will continue more than 30 years of NOAA observations of solar x-ray emission from the sun and will allow SEC to provide continuous, real-time alerts and warnings to critical customers such as FAA and commercial airlines."

In addition to developing the EXIS instruments, the contractor will provide post-delivery and on-orbit support. When launched, the GOES-R series

will upgrade existing weather and environmental monitoring capabilities, and introduce a new era for U.S. geostationary remote sensing.

NOAA funds, operates and manages the GOES-R program. NASA's Goddard Space Flight Center in Greenbelt, Md., manages the acquisition of the GOES-R space segment for NOAA.

The National Oceanic and Atmospheric Administration, an agency of the U.S. Commerce Department, is celebrating 200 years of science and service to the nation. From the establishment of the Survey of the Coast in 1807 by Thomas Jefferson to the formation of the Weather Bureau and the Commission of Fish and Fisheries in the 1870s, much of America's scientific heritage is rooted in NOAA.

NOAA is dedicated to enhancing economic security and national safety through the prediction and research of weather and



climate-related events and information service delivery for transportation, and by providing environmental stewardship of our nation's coastal and marine resources. Through the emerging Global Earth Observation System of Systems (GEOSS), NOAA is working with its federal partners, more than 70 countries and the European Commission to develop a global monitoring network that is as integrated as the planet it observes, predicts and protects.

- Courtesy NOAA

Ham Radio Operators Essential During Hurricanes And Emergencies

During a hurricane or any emergency, keeping communication lines open is critical. And when power goes out, emergency officials count on technology that's decades old.

"Alpha hotel six romeo hotel Oahu," said Roger Hashiro, an Amateur Radio Operator..

Makiki resident Roger Hashiro is testing out his high frequency short wave radio to get ready for what could be a long night. He and other amateur ham radio operators will be monitoring the situation on the Big Island.

"That's a roger, I just heard a report it's gusting 50 miles an hour up on 55-hundred elevation, over," said Hashiro.

The equipment can be set up anywhere in just a few minutes. And during a power failure, Hashiro can still keep communicating with other ham operators. Many Hawaii residents found out the hard way that cell phones can be useless in a blackout. That was evident after the Big Island earthquake in October. Most cell phone sites only have so much power once electricity is out.

"The more people talk and use up their cell phones, the less it's available for emergency responders and for people in the community who really need to make the phone call," said Hashiro.

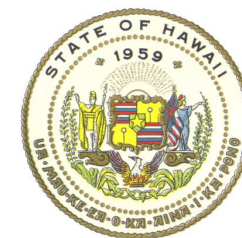
After Hurricane Iniki hit Kauai in 1992, Hashiro and other operators were stationed at Civil De-

fense posts, evacuation shelters, and hospitals. They served as extra eyes and ears to get help where it's needed.

"It's the follow up, the follow up that requires a lot of communication to pull together recovering," said Hashiro.

Amateur radio operators need to be federally licensed. They're required to have the basic understanding of the technology, as well as the rules and regulations. Hashiro and other radio operators give a lot of their time voluntarily during a disaster. They realize that by getting the word out on who needs help, others will step up.

"Whether it's a chainsaw and cutting down a tree that's blocking a road or maybe giving



some medical services or attention or transportation, food and water, we're all in this together," said Hashiro.

- Hawaii State Civil Defense

Station Profile—KF6BKA Rich Long

My station is a fairly small one. I live in a townhouse in Nashville, Tennessee and I hold a Technicians License. My station consists of an IC-207H dual bander, an Alinco DJ-135 2 meter radio, a Grundig Short-wave receiver with SSB, and a Pro-2021 and Pro-8066 scanner. What makes my system unique is the audio system. All signals are sent thru a mixer board and outputted to various ports. My mother is blind and she enjoys the BBC channel 7. I'm able to get that feed on the internet and feed it though the board to a wireless speaker system. My mother has a wire-

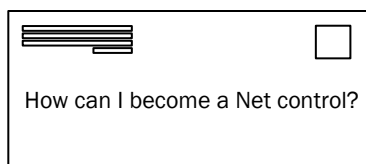
less speaker that runs on 6 "d" cell batteries. I can route audio to a set of computer speakers or to headphones as needed and control the volumes from the sound board. As far as computers go I have an old Hp Pentium II with one monitor attached. I use this to monitor weather statements and to keep the BBC feed on 24/7. At the heart of the system I have a HP Pavilion ze2000 with 512 Mb of ram and it runs a total of 3 monitors (one by USB external video card). These give me great flexibility on displaying information during the net. On one screen I

can run the satellite loop, on another I keep for Swiftwx weather software, and on the main screen is Echolink and trillion (chat software). The table to the right of the picture has a Plexiglas top so I can write on it with dry erase markers so I can look at the board for info on the latest stats of the hurricane or a listing of other nets that are running. I have emergency power for about 1.5 hours of runtime for the laptop, router, and dsl modem.



KF6BKA's shack includes multiple monitors run off of 2 computers

Your Questions Answered



Becoming a Net Control is easy. Just contact Jim Palmer, KB1KQW at kb1kqw@voipwx.net or Matt Hoppes, KB3MSE, at kb3mse@voipwx.net and they will take some information and set you up for our NCO training course.

Weather and Radio On The Net

In this monthly feature we will review different websites relating to weather and radio websites. Our first site is the meteorology department of Penn State University

<http://www.met.psu.edu/weather/>

This site features what they term as the Forecaster's E-Wall

which has a load of useful information and maps that are almost real time. There is also an annotated weather resource list that runs as an applet containing all kinds of weather links organized into folders so you can find what you want.

If you have a website that you would like us to tell the world about then go ahead and write

a review and send it to me to be published here! I'm looking forward to your submissions!!

- Rich kf6bka@voipwx.net



**Your monthly update about
the VoIP Hurricane Net !!**

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Making A Difference!!



WE ARE LOOKING FOR EXPERIENCED NET CONTROLS!!

If you are interesting in volunteering contact Jim Palmer, KB1KQW at kb1kqw@voipwx.net or Matt Hoppes, KB3MSE, at kb3mse@voipwx.net to schedule training.

We are on the web!
www.voipwx.net

Photo of the Month



Cleared train tracks in the Sierra Nevada at Emigrant Gap, California, after a snow storm in 1917. (Source: NOAA/ Department of Commerce. Courtesy of the Historic National Weather Service Collection. Photograph originally published in "Monthly Weather Review," October 1919, p. 698.) (Hope this cools you off!! - Editor)