

The Static

An evolving publication of the Hill
Country Amateur Radio Club

...and now a word from the Prez.

March is starting off with a Red Cross Disaster Assessment exercise. HCARC will be supplying communications for our served agency the Hill Country Chapter of the American Red Cross (HCC). Exercises are a necessary part of preparing for a disaster.

Although our name says we are “Amateurs”, its reference is to the fact that we are not paid for our efforts. Our name does not imply that our efforts will be anything less than professional. Professionalism means getting the job done efficiently with minimal fuss. Showing up at a real emergency having never been involved in an exercise with the served agency will only result in an amateurish operation.

Exercises let both organizations know what to expect from each other and how best to get the job done. An added benefit is you get to really know your equipment - both capabilities and functionality and, most important, whether or not it is working correctly. Case in point, in preparation for this event, Harvey discovered our station had suffered a lightning strike – Ouch! It would have eventually been discovered but perhaps not until after someone had tried to use the station and caused even more

damage. Another plus is a personal one. Often during an exercise you wish you would have brought some additional equipment to make your stay more pleasant. Exercises help you prepare for the real thing. Please read the article about the Alabama Tornado included in this issue. You can readily identify areas of inefficiency that would have been alleviated with prior exercises.

It is true - you can't plan for every disaster. But we, at least, know our served agency. The Hill Country Chapter of the American Red Cross not only needs our help, but welcomes it. Not only are they asking for more involvement from us, they wish to become more involved with us as well. The local Chapter will be providing us with their ERV and the personnel to run it during Field Day.

Please consider becoming involved in upcoming exercises. Your expertise will help in preparing for a future disaster.

73

Terry – W0HIP

If you're old enough you remember Dick Tracy's two way wrist TV that replaced the two way wrist radio. Apple Computer and Samsung are both racing to bring a smart watch to market. Although the Apple wrist iPhone may just be a ploy to send the competition down a false trail. I assume these devices would be Wi-Fi. If that were the case, what would keep some smart Ham from writing an app so you could have remote access to your HF rig right from your wrist?

Wrist DX anyone? The first piece of wearable technology was the calculator watch. Today the most popular digital camera is the iPhone. Kenwood already already has Sky Command so you can link to your HF rig via a VHF link. Currently under development are eyeglasses (Google) with a heads up display so you can access the internet. This would be an easy connect to EchoLink.

IRLP

Did you ever want to work Europe from your handheld radio? Well now our repeater can help you do just that. During the month of February this year we have added the Internet Radio Linking Project (IRLP) access to the club's N5HR repeater. Feel free to try it when you get a chance. Here's how. Go to <http://www.irlp.net> and then to the node page. You can sort the nodes by Country, State, City, Zip Code, etc. and choose where you want to go. Then get on the repeater and touch-tone in the node number. That's all it is to it. The system will connect you to that node if its available, anywhere in the world from your hand held radio. Once you're through, just touch-tone in 73 and it'll disconnect you. Any one licensed to operate on 2 meters can use the system.

The system works two ways, that is your ham friends in other parts of the country can access IRLP on their local node and connect to node 7779 (N5HR) and call you from anywhere in the world on our repeater.

A special thanks to K5HV for figuring out

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why we couldn't get through the repeater controller with the touch-tone digits, but now that has been resolved. Right now until I get another radio programmed for Echolink one system or the other will be off line. Hopefully within the next month or so both systems will be 100% operational 24/7.

Thanks to Fred Gilmore for this.

The Mesilla Valley Radio Club of Las Cruces, New Mexico will be operating special event station K5BL on March 23rd. This in celebration of it being one of New Mexico's oldest, continuous operating radio clubs.

K5BL will be commemorating the club's 63rd anniversary by operating from 1500 to 1400 UTC as near as possible to 14.330 and 21.337, MHz. A special QSL card for the event will be available by request. To get one, send your QSL card confirming your contact with a business sized self addressed forever stamped envelope
Special Events Station
K5BL Anniversary, c/o Mesilla Valley Radio Club,
P.O. Box 1443, Las Cruces, New Mexico 88004-1443.

HAM RADIO IN SPACE: UKUBE-1 TO LAUNCH IN JUNE 2013

The United Kingdoms' Herald newspaper reports that the UKube-1 CubeSat will be launched in June and will carry an amateur radio transponder to orbit.

According to the news story, the spacecraft is being built for the UK Space Agency by Clyde Space. If all goes as announced its launch will take place from the Baikonur Cosmodrome in Kazakhstan on a Soyuz-2-1B booster this spring.

UKube-1 will carry a set of AMSAT-UK FUNcube boards to provide an amateur radio 435 to 145 MHz linear transponder. Also as a part of the payload will be a 1200 B-P-S-K beacon for educational outreach.

The newspaper also reports that Clyde Space has announced plans to build a facility in the United States. More is on-line at tinyurl.com/uquibe-june-launch (The Herald)

St Patrick's Day special event

The West Tyrone Amateur Radio Club will be taking part in the St. Patrick's Day celebrations on Monday 18th March 2013 in Omagh, Co Tyrone.

The club will be running a special event station using the call sign GB1SPD. They will be operational from the Strule Arts Centre in the Heart of Omagh Town during Omagh District Council St Patrick's Day Parade and Festival.

The club will be operating on HF, VHF/UHF, Echo Link and Digital Modes between 11am and 5pm.

We look forward to the prospect of working as many stations as possible. Special Event

QSL cards will be available to those who wish to have a conformation of the QSO.

Details available on www.qrz.com and www.wtarc.org

Note this will also be on EchoLink so you can work it with a Tech license.

Ferretting out noise sources

By Dan Romanchik, KB6NU

About three months ago, I put up a 20m antenna—an end-fed, half-wave antenna (<http://www.kb6nu.com/kb6nu-finally-builds-an-end-fed-half-wave-antenna/>). Right off the bat, I was flummoxed by the high noise level. It was nearly S9, obliterating all but the strongest signals.

The strange thing about this noise was that I was only experiencing it on 20m, and only using this antenna. If I switched to my 40m dipole, the noise dropped back to the S1 - S2 noise level that I usually experience here. (Yes, I know. I'm really lucky to have such a low noise level here.)

It didn't really make any sense to me that this antenna would be so susceptible to noise while my other antennas weren't, but I just couldn't come up with any other explanation. I was not experiencing any noise on any of the other bands, after all. Sometimes 40m is so quiet here that I check to make sure that the antenna is connected to the radio.

As luck would have it, I stumbled upon the noise source a couple of days ago. I had taken the laptop I normally use in the shack somewhere one day last week, and when I returned it to the shack that evening, I switched the rig over to 20m before connecting the power supply back to the laptop. No noise! When I plugged the power supply into the laptop, the noise jumped up to S9 again. The problem noise source was found!

I posted about my experience to my blog and to the HamRadioHelpGroup (<http://groups.yahoo.com/group/HamRadioHelpGroup/>). Mark, K5LXP, one of the gurus on the RHG, advised me to throw the main circuit breaker in order to determine if it was something inside the house generating the noise. Bob, K0NR, commented on my blog post, "I have found that flipping off circuit breakers in my house is a good first step to try and find a noise source. Usually ticks off the family, but what the heck :-)" Either of these methods will help you determine if a noise source is inside or outside of your house.

I'm still thinking that the way my antenna is positioned may have something to do with its picking up the noise generated by the power supply. I plan to play around with the positioning of the antenna once the snow melts and see if that makes any difference. Until then, I can work 20m with the power supply disconnected and run the laptop off the battery.

So, the next question you might ask is how does the antenna work? It seems to be putting out a very good signal. One evening last week, I worked several DX stations, including 6W/HA0NAR in Senegal. It's not a beam, but I'm pretty happy with it.

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When he's not worrying about his signal-to-noise ratio, Dan, KB6NU publishes the "No-Nonsense" series of amateur radio license study guides. The latest in this series is the No-Nonsense Extra Class License Study Guide. For more information, go to KB6NU.Com or e-mail cwgeek@kb6nu.com.

Thanks to Terry Hipskind for the following article.

Alabama Tornado

By Barry Altman W6GFN, Southeastern MN Chapter

In April I was asked to deploy to Birmingham Alabama in response to one of the deadliest series of tornado to ever hit the United States. 336 tornadoes struck the Southeastern United States during the period of April 25 – 28.

Alabama was left in ruins with 239 people dead and many more injured.

At the beginning of this disaster event, communications were disrupted on all fronts directly and indirectly. In the field there was no cellular phone service and some local governments had lost their ability to effectively communicate with their units. Even the Amateur Radio service was interrupted as many statewide repeaters were damaged or

destroyed due to the scale of this event. I arrived at the Headquarters a few days after the tornadoes. At that time there was still no power to the northern half of the state.

During my in-processing, I met with the DST Chief, Sean Welsh who advised me that I was the last of his management team to arrive and that I would be handling communications. I noted that it had been a long time since I actually worked for a DST Manager and asked him for guidance to improve my own management style and capabilities. The others in the team had their hands full getting the headquarters operational.

My first task was to see what could be done about communications into northern Alabama. Already in place were two radio amateur operators who had set up a couple of dual band radios at the headquarters. This would be the start of a relationship that would greatly assist in the successful outcome of this relief operation.

I introduced myself to the amateur radio operators and asked them for a briefing. I was advised that they were sent by the Birmingham Amateur Radio Emergency Services (ARES) coordinator to monitor the Alabama VHF net and relay traffic as appropriate. This was working well as most of the seriously affected communities had an ARES presence.

Our first assignment for Amateurs was to

shadow the bulk distribution runs heading north the following morning. We arranged for operators and were disappointed when they did not show up. It turns out they were in Tuscaloosa and not in Hoover (the suburb of Birmingham where the DROHQ was located.) I had some discussions with the ARES State Coordinator Greg Sarratt W40ZK, to arrange amateur radio operator support. Unfortunately, Tuscaloosa was one of the cities hit by an EF-5 tornado. Although Greg is the State Coordinator, his focus was his own back yard. After a follow-up discussion we developed a clear understanding of expectations. As an outcome, another ARES member would coordinate all ARES activities for the duration of the response.

Lesson learned: ARES is a county-based organization. The members are very territorial. It took some coordinated effort with the DOC, Sean Welsh, Gregg Sarratt, and myself to obtain assurances that ARES members will follow the disaster needs and work outside their local counties.

Ultimately, we ended up with several operators shadowing our distribution trucks to the North.

As our Amateur Radio support evolved we decided we should establish an Amateur radio Liaison at each Kitchen. This actually took minimal effort, as it turned there was a local presence in all these areas from previous ARES deployments.

Our Amateur Radio Liaison (ARL) asked that the field operators check in with the kitchen

managers on a regular basis.

When the kitchens were established, the Mass Care Chief asked us to set up 47 MHz base station radios at each one to communicate with the growing number of ERVs on the job. Sean Welsh had only assigned me one Service Associate, as the other DST staff were busy supporting the computer operations and help desk. I asked the ARL if ARES would be agreeable to having an amateur radio operator assist in radio base radio installations. An agreement was reached so we chose Tuscaloosa as our first installation and I went along to train my "staff" of an SA and two Amateurs. The installation went very well and I explained how we need to interface with the kitchen manager and make sure they have our contact information. We also issued 3 or 4 Hand Held VHF-Low Band (LHH) radios to each kitchen to assist in local communications.

Communications requisitioned a small box truck for field work. The 12' box was ideal for holding antenna poles as well as the antenna tubes and other equipment. We always sent a team of at least two into the field, in part, for safety, and the fact that installing an antenna requires at least two people. Kitchen staff was always ready to assist in raising a mast or two.

After we had kitchen radios in place I started to receive complaints about the ERV radios. National Fleet Operations (NFO) was on the job. It turned out that one of their staff, Tony Annese, is also a DST team member. We

developed a good working relationship and divided responsibilities in that he would replace radios and we would inspect the radio and PA systems. We were rapidly approaching 100 ERVs on the job and they were all over Alabama. ERVs were having technical problems and couldn't leave their assigned service areas. I didn't even bother to ask Sean for 3 or 4 Field Teams to support communications. I knew I needed another way to address the ERVs.

After discussions with Gregg Sarratt and the ARL, we agreed that we would further expand the role of Amateur Radio Operators to inspect and repair ERV radio systems. I created an ERV Checklist of what needs to be done to inspect an ERV and a checklist of supplies to work on an ERV. We selected 3 operators to serve as Trainers. These people would go to each of the kitchens and train the local amateur who was already there to inspect ERVs. We initially gave each kitchen 2 spare antenna whips and a spring ball assembly. We would use the Logistics Courier to bring out any additional parts.

I conducted the first of several DST ERV Radio Inspection Classes. I explained how we inform local staff of what we are doing, of how to test the radios and PA systems. We talked about how to replace micro-phones and antennas, the two most common problems on ERVs. Each student was given a copy of the Checklist for future use.

The Trainers conducted their field training the next day and soon status reports were coming

in on a daily basis. By this time, David Riegler was now assigned to me for the duration of his deployment and he spearheaded field operations, which included ERV inspections. We now had many ERVs returning to the HQ for out-processing and inspection which Dave and local amateurs handled. When I left the Job after 3 weeks, we had inspected 94 of the 100 assigned ERVs.

Lesson learned: Amateur Radio Operators are more than eager to accept additional assignments. During this operation, amateurs saved the Red Cross significantly by reducing our manpower requirements. In Hurricane Ike, we had 6 or 7 people in communications managing field operations. We handled this DRO, a level 6, with 2 Red Cross volunteers. In all, we had 30 Amateur Radio Operator's throughout Alabama registered to assist the Red Cross.

I should interject at this point, that for the entire duration of using the amateur radio operators, we had everyone registered as a Local Community Volunteer. Staffing provided great assistance, including background checks for our longer term volunteers.

ARES was deployed for 3 weeks from the start of the tornadoes. They provided us with assistance for the last two weeks of their deployment. It is with their help and cooperation, that DR491-11 Disaster Communications was successful.

An operation this size needs a warehouse. One of the tasks of Communications is to install a fax, in addition to other communications needs. The simple solution is to use a Cellular Fax. Unfortunately, these are no longer in our inventory. The complex solution is to install a VSAT. Somewhat overkill for a fax machine. After discussions with Sean and the DOC, we decided to order a DSL phone line. After some research of the Bell South organization, I found the person who could make this happen. She told me that they had a promotion on a high-speed Internet service that is faster and for 3 months, cheaper than DSL service. So being a good steward of the Red Cross dollar, I asked her to proceed. Installation day arrived, but no one from Bell South did. After follow up, they said they had some technical difficulties and it would be a few more days. Then I was told it was forwarded to Engineering. Every few days, I received one excuse after another. On one call, the representative mentioned something about getting fiber-optic cables into the area. It was during this call I learned that the first person that offered the promotional service never mentioned that the high speed was a result of bringing fiber optic cable to our premises. I immediately knew why Bell south was having so much trouble [with] a simple phone line.

Lesson learned: When ordering a phone line (POTS, DSL, or T-1,) be very clear that you understand what the representative is placing in the order. Phone companies may have marketing package names for services and while sounding similar may, in fact, be

something entirely different.

Retrospectively, a simple phone line and analog fax would have been a better solution.

We also had the responsibility of making sure that all Red Cross Facilities had weather radios. We had plenty of radios to distribute. Life safety and Asset Protection (LSAP) distributed some to Shelters and Communications distributed them to kitchens.

Lesson learned: Make sure LSAP knows to sign each radio out on a 6409 (Greenie). We assumed they would track the radios and they thought they were consumable and did not keep records.

During my time in Alabama, the Birmingham Amateur Radio Club had their monthly meeting and I was invited to be the guest speaker. What better way to impress a group than to show off an ECRV? 4705 from Phoenix, one of four on our job, was on hand and made a great show. I had a copy of the Katrina DST Video and showed that and then I presented a PowerPoint I use for talks similar to tonight. The evening was well received by the 30 members in attendance.

Every DRO is different, and this one was no exception. I must say I learned a lot. This was the first time I was a manager on a DR larger than level 4. I worked for a DST Chief rather than someone for Logistics and I picked up many tips and concepts from

Sean. While I did my part, I cannot express how much of a team it takes to get the job done and we had a terrific team. I am still amazed how a group of individuals from across the country come together and function as a DST Team.

I also want to thank all the members of Alabama ARES who contributed so much to the success of this disaster relief operation. ARES members provided 2 dual band radios - a VHF-D-Star radio and a HF rig to accompany our VHF-LB Base radio. They installed all their antennas on the roof for statewide coverage. I hope some of those reading this article have an opportunity to work with local radio amateur operators of future DROs.

Ed comment. Each disaster operation is different and calls for flexibility. The wild fire event in Bastrop, Texas did not use amateur radio operations – all communications were handled by cell phones.

CQDX, CQDX, CQDX

Hello all...

I have had requests from Bob, K5YB and Jerry, WA9KXZ a repeat of the DX Program which we presented to the club the first week of February.

This would be an approximately 4-hour presentation of the entire program, and it would be held on a Saturday at the Red Cross Building in K'ville.

Is there anyone else that would like to join us

for the presentation?

No date has been set yet, but it will be before the end of April, when Jerry does his QSY to the Windy City for the summer!!

So please let me know, and include any date that you would prefer.

TNX es 73

Don
W4WJ