The Messenger

Volume XV, Issue 1 **January 2012**

Logbook of The World to Now Support CQ Awards

The ARRL and CQ Communications, Inc have signed an agreement to begin providing support for CQ-sponsored operating awards by the ARRL's Logbook of the World (LoTW) electronic confirmation system. The agreement was announced jointly today by ARRL Chief Operating Officer Harold Kramer WJ1B, and CQ Communications President Richard Ross K2MGA.

CQ's awards will be the first non-ARRL awards supported by LoTW and will be phased in beginning with the CQ WPX award, with additional CQ awards to follow. The ARRL's LoTW system—an interactive database recording contacts between radio amateurs—was created in 2003 and has been adopted by 47,500 radio amateurs worldwide. It already has records of 400 million contacts and is growing weekly. The target date for beginning LoTW support for WPX is April 1, 2012. Amateurs will be able to use LoTW logs to generate lists of confirmed contacts to be submitted for WPX credit. Standard LoTW credit fees and CQ award fees will apply.

ARRL Chief Executive Officer David Sumner K1ZZ, observed that this step gives radio amateurs throughout the world an inexpensive and convenient means of gaining credits toward CQ's popular operating awards: "LoTW has significantly increased interest and participation in the ARRL's DXCC, Worked All States and VUCC awards programs. We anticipate a similarly positive response to the addition of the CQ WPX award. Amateurs will be able to spend more time operating and less time chasing QSL cards."

CQ President Richard Ross K2MGA, said he is very pleased to be able to move forward with LoTW support for CQ awards. "We have had excellent results with electronic confirmations for several years," he explained. "I am glad that we are now able to begin expanding that convenience to those participants in our award programs who use Logbook of The World. We look forward to a smooth launch for WPX and to the expansion of LoTW support to include the rest of our award programs, as well." *Reprinted from the ARRL web site*

How to Count Countries Worked: A New DX Scoring System

Reprint of article from October 1935 QST

This piece has been started half a dozen times in the past five years. It has been the subject of more cerebration and contemplation and tabulation and plain downright misery than one cares to recall. It is presented now - in a form far from what we should like it to be - only to silence the insistent demand that has come down through the years. "How about a list of countries of the world?" "How do I count countries worked?" "Are Tasmania and Australia separate countries?" - and a hundred variations of this latter. With the world WACing at a terrific rate these days, faster by far than ever before, the number of countries worked is increasingly becoming the criterion of excellence among outstanding DX stations.

How, then, do we count countries worked? The simplest way, of course, is to check against a standard list of countries of the world. Well, back in 1932 we began the preparation of such a list. We laid down fairly definite rules as to what constituted a country, and proceeded to tabulate the

Inside this issue:

ARRL Diamond DXCC Challenge Rules	4
Reflections of a DXer's Career	4
Charlie's Whistle	5
QRN from the	10

countries of the world. When we had reached several hundred, with the end not yet in sight, we hollered, "Whoa!" and decided that there must be some other better method. We knew that there were not more than 150 countries in which amateurs had ever been worked; it might he possible to list only them. But we had no assurance that amateurs would not encamp in some of the many remaining countries and thus render our list obsolete. An even more pertinent disadvantage was that it seemed impossible to even list all the countries in which amateurs had been worked to date; new countries were always popping out, astonishingly, like jack-in-the-boxes. Able cooperation was enlisted - Eric W. Trebilcock of Moonta, South Australia, Arthur W. BraatenW2BSR, O.M. Carter W9ADN, and others sent us lists they had prepared. We got lists of countries actually worked from such outstanding stations as W8BKP and WlTW-W1CMX-W1BUX and others. But it seemed no list was ever complete; even if brought up to date for a moment, it rapidly became obsolescent. And amateurs were still clamoring for s list of countries of the world!

The next attempt occurred in 1934, in an endeavor to rationalize and unify action on WAC applications by member-societies of the I.A.R.U. A tentative list of some 150 countries, limited strictly to continental mainland boundaries, was prepared and submitted to the member-societies. Even this list, restricted as it was, was not satisfactory; indeed, we almost immediately decided that the only satisfactory solution of this particular problem was a map of the world showing continental boundaries, which was prepared, approved by the membership, and published on page 41 of the November, 1934, issue of QST.

But this still left the problem of counting countries worked. Now, we could publish a list of all the "countries" of the world, but to be useful it would occupy seven or eight pages in QST, pages which are vitally needed for other material, and even then its utility would never reach a very high percentage. And the probable wear and tear on that COPY of QST is enough to make one shudder!

The better plan, it seems to us, is simply to give the general rule we follow in deciding whether a country is a "country," together with some pertinent examples, in order that each amateur will have enough information concerning standard practice to be able to prepare his own list of countries worked and have it uniform with other lists.

The basic rule is simple and direct:

Each discrete geographical or political entity is considered to be a country.

A few moments' consideration will serve to show that this is the only workable rule.

It is obviously incorrect to count prefixes alone (except for such purposes as the International DX tests where, paradoxically, confusion means simplification) because many places having the same prefix are quite widely separated geographically. In addition, confusion develops when a country changes its amateur prefix, with the result that an amateur might claim two countries worked whereas only one is proper.

It is obviously incorrect to accept either geographical or political divisions alone, as immediately the most glaring inconsistencies appear. The only general solution that comes anywhere near to solving the problem seems to be to reduce the definition of "country" to the smallest common denominator - a single unit in the world's geographical and political proportions. This has the added advantage - from the ham viewpoint - of creating a long list, offering the widest possible realm of achievement; and who will fail to find that an attractive feature?

To illustrate how this rule works out, a few general problems which have been raised in correspondence will be cited:

Alaska and the United States are separate because of the geographical division, just as Mexico and the United States are separate because of the political boundary.

Tasmania and Australia are separate because of the geographical division.

ZS, ZT, and ZU are counted as one country, because there is no geographical and political distinction; ZE, on the other hand, is a separate country.

Scotland and England are individual countries, as are the Irelands.

Sumatra, Java and Borneo are separate, as are Celebes and New Guinea.

Puerto Rico and the Virgin Islands are each separate.

The Federated Malay States are one country, having a common government and being geographically connected.

Some distinction between *islands* and *island groups* is necessitated. Island groups, constituted by several islands commonly grouped under one name and under the same political control such as the Hawaiian Islands, the Tonga or Friendly Islands, the Sandwich group, etc., are regarded as one country. Where these groups are under different governmental control, they are subdivided into as many countries as there are governments. Individual islands, such as Bounty Island, Trinidad, Ascension Island, Amsterdam Island, etc., are regarded as separate countries. The principal place where this differentiation is likely to cause trouble is among the Pacific Islands, but even here the rule is found to apply remarkably well.

The few examples given will be found to illustrate the working of the method quite effectively. If any questionable points arise, A.R.R.L. headquarters will be glad to offer a ruling.

PROPOSED DX SCORING PLAN

Now we come to a somewhat different, although an allied, subject, broached by N. M. Patterson W4EG. He is perturbed, and it seems many DX men agree with him, over that fact that under the countries-worked plan one VK QSO from America counts for as much as working all eight VK districts. Similarly, the European ham with one lone W QSO gets as much credit as another who has worked all nine call areas. "That there is a whale of a difference you will readily see," he writes through Director Caveness.

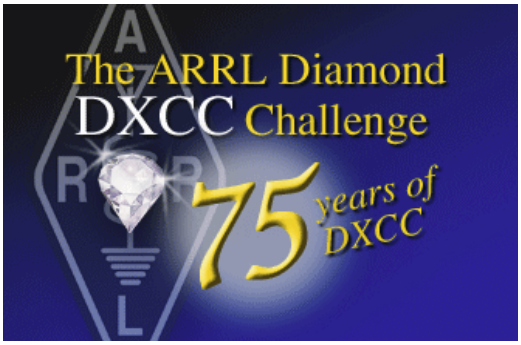
In view of this situation, W4EG proposes that there be created a "rule for counting DX, to be known as the DX Score." This score will be computed by taking the number of districts worked in each country, and adding it all up into a grand total. For example, we'll suppose that W8BKP, who had when last reported worked 123 countries, counts nine W call areas, eight VK districts, six Spanish districts, etc. On the basis of adding the figures for these countries alone, the score would be 143; probably the grand total would be well over two hundred.

This seems to us to be an entirely rational suggestion, far more so than many that have been perpetrated. For ten years or so it has been impossible to work any farther, in terms of terrestrial miles; the only room for expansion is to work as many places as possible. The first recognition of this fact resulted in the inauguration of the WAC certificate. Totaling the number of countries worked followed naturally. This new proposal, expanding and improving the countries-worked idea, seems to be a logical next step. Indeed, following along this line of thought, one foresees the time when DX will be counted in cities worked, or stations per square mile, or something even more fantastic!

But for the present the DX Score idea looks pretty hot. It has the major beauty of simplicity. Just total up the districts worked, and there you are! We expect it won't be long before a lot of QSL cards will bear the legend, "Continents worked: 6; countries worked: 66; DX score: 92."

What do you say, old man? *Clinton B. DeSoto Assistant to the Secretary, A.R.R.L.*

ARRL DIAMOND DXCC CHALLENGE RULES



1. The Diamond DXCC Challenge Awards are available to all amateurs worldwide who contact a minimum of 100 countries from the Diamond DXCC List. US Amateurs must be members of the ARRL. Generally, the rules for the Diamond DXCC Challenge are the same as the rules for the DXCC Program, except as listed here.
2. Contacts must be made from within the same DXCC entity by the same operator.
3. Contacts must be made during 2012 – from 0000Z on 1 January, 2012, through 2359Z on 31 December, 2012. All Amateur bands may be used except for 60 Meters.
4. There are no mode endorsements or band endorsements. The Diamond DXCC Challenge is considered to be a Mixed-Mode/Mixed-Band award. There are no power categories or restrictions for the award.
5. Confirmations are not required to obtain this award, but HQ will review submitted entries for accuracy and validity.
6. The Diamond DXCC Challenge certificate will be available for working 100 entities and will be endorsable with stickers at the following levels: 125, 150, 175, 200, and 225.
7. Applications should use ARRL-supplied forms available online or obtained by writing: DXCC, 225 Main St., Newington, CT 06111.
8. The Diamond DXCC Award certificate fee is $12 including shipping within the USA, and $13 including shipping outside the USA.
9. Endorsement stickers are $1, including shipping in the US, and $2 outside the US.

Thanks to W3LPL, IK2NVR, YO3JW, and K9JF for their assistance with this project.

REFLECTIONS OF A DXER'S CAREER

a factual report of a DXer

As I sit back and reflect on what ten years of Amateur radio activity has brought me, I scan the shack looking at hardware, awards, and a well-worn chair. Yes, I have been blessed with the means to accumulate some good equipment. I have been fortunate enough to earn my fair share of awards. I keep promising myself that I will get a good comfortable office chair instead of sitting on this hardwood Windsor chair.

All that pales to what the hobby has brought me. I have met people from all walks of life and from (at present) 307 DX entities. I have shared stories and a lie or two with many of these folk. I have enjoyed a meal with many. I have entertained a few from some distant land here in my home. But the best parts of it all are the friendships that I have forged with people that I would otherwise, never in a million years met.

I have discovered just how much I could have in common with someone who lives 5000 miles away. My only regret is tabling my pursuit of the hobby for so long, thinking I have missed out on more friendships had I earned my license as a teenager way back when.

When someone asks me what interests me in

amateur radio, I respond with DX, top band, and moon bounce. Chasing DX has been fun most of the time, top band has proven itself more of a challenge from a noisy city environment, and moon bounce is yet to be done with my own equipment. This trio may have brought me to ham radio but as I mentioned before, I don't think it is what has kept me. Again, it's the friendships. That is what I tell a new or prospective ham. There will be a drawing card for any hobby but it is what keeps you in it that really matters.

Here's to friendship!

CHARLIE'S WHISTLE

In last month's tale, we read about the frenetic work done by Charlie's new contester friends to Charlie and Mary's new winter home in Belleview, Florida. Their work was capped off by a northern style turkey dinner put together for the construction workers and their families complete with cranberry sauce, turnips, parsnips and apple and blueberry pies a la mode. Many of those enjoying Mary's "northern" cooking for the first time had never tasted buttered parsnips with carrots, mashed turnips, baked acorn squash, and smashed white potatoes with a butter-cream sauce. They were accustomed to southern Thanksgiving dinner side dishes like pepper jack-bacon mashers , marinated veggies, classic baked corn pudding, a requisite bowl of grits and chitlins along with garlic-rosemary French rolls, topped off with praline-pumpkin cake.

Some dinner guests couldn't get past the parsnips. OK, that's an acquired taste that everyone doesn't love, but in general, these southern born folk took raht kindly to Mary's Yankee vittles. Mary's new friend, Carol, was born in Florida but learned classic cooking at culinary school, so she had experienced different regional cuisine of the US. She loved working with Mary who had learned all that she knew in her kitchen and by reading the articles written by professionally trained culinary school graduates like Carol. So, it was a most fortuitous meeting of these two talented people.

The result was that 50 dinner guests enjoyed a terrific Thanksgiving dinner at DX Hill South this year. For most, it was an experience that they'll never forget and will talk about for years to come. It was simply great fun for Mary as well as Charlie but in different ways. Charlie was really excited to see so many good people enjoying the day and Mary's cooking. Of course, he's justifiably proud of Mary's cooking skills and loved to show them to his new friends. He also seemed enthused by what this contest club group was doing to his new winter ham station. He still finds the entire thing hard to accept, that so many hams would freely contribute their talents and equipment in exchange for a place to set up a contest station. "Gosh! Ham radio station space must be scarce in Florida", he thought as he considered what he was experiencing.

But, that's exactly what was happening. Charlie just shook his head in disbelief. After Mary and Charlie returned to DX Hill North, Jake and his crew went back to work with repairs and upgrades to the property that Mary and Charlie had listed. The finish target for their work was only a few weeks away. Their schedule calls for all work to be done by the ARRL DX Phone Contest on March 3rd. There's still a lot of work to do. Jake had to work much longer days than he prefers, but a handshake is a handshake. He was going to deliver what he agreed to.

During December, except for a few days around Christmas weekend, Jake, Joe and a few other men were working from very early morning, shortly after dawn until shortly before dark. Joe didn't have nearly as much remaining in the electrical department and gave Jake a hand putting up sheetrock, panel board and doing some painting. Everyone worked like they were on a mission. By George, they promised to finish everything by March 3rd and that's what they will do. But, Jake's wife noticed his long hours and unusual dedication to this project and she asked what he was do-

ing. Both he and Joe are trying to retire and work shorter days and under less pressure.

Jake simply observed that "no customer before had ever come down and put on a feast like Mary did at Thanksgiving time. It's magical how motivating that can be." She was one of the dinner guests, of course, and had to agree that it surely was a first rate dinner and probably a wise investment by Mary and Charlie to guarantee that their work would be done perfectly and on schedule.

The club volunteers returned to work after Thanksgiving also. They hit their duties with a full head of steam. Joe reported to Charlie in a phone chat shortly after he had returned home on DX Hill (north) that the third tower near the house was going up next. The crew had plumbed the base and poured the concrete. While they waited for the base to cure for a few days, the same crew started rolling out radials under each of the three towers. They used 55 foot radials every 5 degrees as best they could, allowing for the house and barn being in the way. The radials consumed nearly 12,000 feet of wire.

Fortunately, Belleview is in Florida horse country. There are plenty of fenced corrals and other horse control runs all over the region. In the middle of horse country, you can be sure of finding a number of equine supply distributors. One of the contest club's members who is also working on the DX Hill South crew is the owner of one of the largest equine (horse) supply distributors in northern Florida. He is a fairly new ham but an older man. Jerry is his name and he is planning to turn the equine supply business over to his two sons within the next few years. In the meanwhile, Jerry is learning all that he can about being a competitive contester. He became a ham when he decided that retirement time was close.

Down in Florida horse country, the business interests of many farms are often merged by related and agreeable owners to take advantage of the economy of scale in boarding horses and maintaining good working crews. It is common to see existing corral fencing to be ripped out after a few years to make room for new posts and have wire strung. The old wire is returned to the supplier as scrap. Strong 12.5 gauge galvanized steel wire is commonly used for making electric horse fences for corrals. It is the most economical and durable. Some is plastic covered and some is bare metal. Old fencing wire is taken in and put into a pile until they accumulate a ton of wire. The scrap dealer will come and pick up a ton but will charge to pick up a smaller amount.

Jerry donated all the wire needed for radials from his large pile of scrap wire that was turned in by customers. With retail pricing for new fence wire running at $150 for a 1300 ft. spool, a little more than a dime per foot, DX Hill South's radial wire would cost over $1300! Of course, Jerry is the fence dealer, so his wholesale cost would be a bit less but still an awful lot of cash to spend for radials. Donating from the scrap pile of used wire kept the dollar cost down to near zero. Radials don't have to be heavy or matched or nice to look at. Radials merely provide a ground reference plane for the antennas above to work against. Radials don't have to carry current, high voltage or even be very strong. They simply have to remain intact.

In Jerry's scrap pile, the crew found some chicken wire as well. It was thrown into a pile but fairly good condition. They took it back along with nearly three miles of fence wire. Two of the crew spent a few hours laying out the chicken wire into several flat layers. After stringing out the wire under each tower, they laid large panels of chicken wire and soldered them to the radials every few inches. For those readers who don't believe that galvanized steel can be soldered with a Weller gun and ordinary solder, let me assure you that you can. It solders just like copper if it's galvanized. It was awfully tedious work on hands and knees but adding that extra ground screen at the base of each tower will help greatly and may make the difference later in a pile-up. After all the radials and screens were down and connected, they spread several dozen yards of dark rich farm topsoil over it and planted a southern variety of heat resistant grass. That completely buried the wire, about 2-3 inches below the

surface.

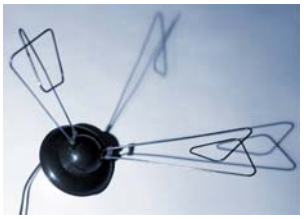
In a large club like this one, you find a wide variety of skills amongst its members. Most of the members are retired but that doesn't mean that they forgot everything they ever knew or left their business contacts locked in their former offices and trucks. One of the members was a retired landscaper and thought it would be attractive to lay down flat limestone pavers between the house and the barn. That would provide a more comfortable walk to and from the barn for Charlie. Adding them in a winding S shape adds a nice touch to the space as well. At present, walking on the pavers will help keep dirt out of the house and barn since nothing has grown yet. Once the grass fills in, it will look much better. Joe and Jake don't know it yet but as soon as Mary sees that, she will start planting flowers along the path to dress it up.

As far as station equipment goes, the club must have been anticipating this day for a long while because radios, amplifiers, computers, keyers, all sorts of accessories, reels of coax and several bundles of patch cords rolled in and stacked far out of harm's way from swinging hammers. The individual station configurations will be reported in next month's column.

Joe regularly reported progress to Charlie but downplayed the amount of equipment rolling in. He realized Charlie's sensitivity to the imbalance of investment there seems to be in play. Actually, the club has been looking for a station site for years and DX Hill South is the ideal location. It's worth every penny to be able to push the club's ability to the max. Lots of the club's cost is up front and one time. Charlie's expense will be ongoing with utilities, food and maintenance. Over a few years, the investment will balance out and may eventually reach a tipping point where Charlie will wonder why he did what he did. Oh well, hopefully, that will be many years down the line.

By the weekend of Jan 21-22, the club members had erected a 32 element 2 meter array, a 32 element 1.25 meter array and a 32 element 70 cm. array atop their VHF tower and completed connections into the operating position. The clever folks in the club had figured how to construct a 12 element 6 meter beam intertwined amongst the elements of the 2 meter array. The 20 through 10 meter log periodic was cabled up and its rotator and control cables were installed. So, since they had these antennas up and running, they decided to operate in the North American QSO party on HF while having a test run in the ARRL VHF Sweepstakes. Ordinarily, the club would not split its resources between two unrelated contests like this but as a trial, they thought it would be useful to see how everything functioned and whether there was any mutual interference between the equipment. Let's be honest, they were simply anxious to fire the station up.

At the end of the weekend, they were astonished with the results of their effort. No one put in an extraordinary effort but their scores were greater than they ever experienced in previous efforts in these contests. Differing band conditions may have played a part but more likely, their greatly improved signal, caused by the superior antennas, ground radials and their professional installation work were most likely the reason for the improvement.



More antenna work needs to be done. On the antenna punch list are:

1. Separate 1000 ft. Beverage antennas for Europe, SE Asia, Japan and Africa.
2. Four separate square arrays for 40, 80 and 160 meters.
3. Two half wave "bird cage" dipoles for 80 meters, one broadside east and west and another north and south.
4. A two element 40 meter beam above a mono band 20 meter wide spaced beam, atop the tower next to the house for Charlie to access easily.
5. A few discones and VHF/UHF vertical beams on the barn roof to access local spotting repeaters. Also a discone above

the 40 meter beam to provide VHF/UHF for Charlie to use from the house.

All this antenna work needs to be completed before the ARRL DX Competition on the weekend of March 3rd and 4th. Lots more wire will be needed and most of it can come from the stock of galvanized steel wire as long as pieces don't have to be spliced. Running legal limit power, the club doesn't want any issues with wire joints, possibly arcing or breaking in the middle of a contest.

They anticipated the need for a large quantity of coax and had purchased and stored four thousand foot spools of LMR 400 coaxial cable some time ago.

Some members have been making up coaxial jumpers for the last several months, well before meeting Charlie and coming to any agreements with him. They just knew that someday, they would need them. They have hundreds of jumpers on hand, from three feet to twelve feet in length. These will be used up quickly when the switching panels are installed. These panels will permit the operator at either of the two contest operating position or either of Charlie's personal operating positions in the barn or the house, to select any antenna for use and see immediately if any antenna is already connected and to which radio position. If that antenna is in use, the switching panel will lock out any attempt to remove the antenna. It will also keep any accidental or deliberate attempts to feed the output of one radio into the input of another, which would quickly destroy the radio.

As was reported earlier, Joe telephones Mary and Charlie regularly to report on the progress of the contest station and their new Florida home in general. In this call, Joe informed Charlie that they had put a statement together to show all the work that had been done to date and all the donated material and labor from the club and individuals. Joe asked if he wanted it by regular mail or e mail and Charlie chose snail mail but then asked Joe to read the highlights to him.

Joe reported that the labor to date was $37,512.93 and $35, 765.77 was donated by the club members. Lumber, plumbing, underlayment, insulation, wire, electrical boxes, conduit, misc. hardware totaled $71,113.67 and donated material totaled $65,400.00. Fees to the county and utility company were $725.00. The amount payable and due by Charlie and Mary, as of January 22, 2012, is $8,185.83.

Charlie asked, "So, where are the towers, wire, coax, radios and all the station costs?" Joe reminded Charlie that the club agreed to supply all of that. Charlie pointed out, "Well, you shouldn't pay for my own operating position also, should you?" Joe replied that they really should. It's all one station. So far, the club and its members have contributed $101,165.77 in labor and material. Joe estimates that all work is about 60% completed.

Mary was also on the line and asked about her kitchen remodel that she told Jake about when she was there. Joe told Mary that "Jake is personally doing the kitchen and is nearly finished. He's doing some tile work and painting now. All the plumbing and appliances are finished. The new tile floor is going in this week." He went on to say that, "they cleaned out the bedrooms and the new furniture that you purchased when you were here is being delivered tomorrow. We gathered up some dishes and silverware to get started when you come down. We also will have a coffee pot, toaster oven and stand mixer on the counter for you, Mary."

Charlie and Mary finished their call and once again asked one another how they were so fortunate to find such great people in Belleview, Florida. Without Jake's and Joe's leadership and the contest club's generous help, there's no possible way that they could have achieved this sort of second home. Oh sure, between the A/C and the occasional 24/7 contest action, their utility bill will probably hit several hundred dollars per month. But, the heating bill is fairly low as well as taxes and insurance, less than half of what they're accustomed to paying up north.

With the house just about ready for occupan-

cy, they decided to go down as soon as the building inspector signs off on the house. That may be next week. If they go down sometime during the week of February 1st, they'll escape a month or more of winter and Charlie will be able to go to HamCation in Orlando on February 11th. That will be terrific! He started to make notes of his snowbird friends that he can call and go with through the hamfest flea market. Let's keep fingers and toes crossed that we don't get snowed in at DX Hill North. See you all next month after HamCation. *Bob Beaudet W1YRC*

Reminder: Dues are Due!

Please remember to pay your dues at the meeting on January 30th.

Articles Wanted for the February Issue of The Messenger

Please send your articles to WN1X@cox.net. Thanks!

The Messenger

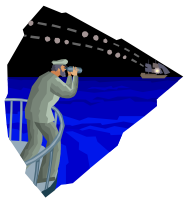
A monthly publication of:
Blackstone Valley Amateur Radio Club, Inc.
Dave St. Onge (W1HW) Trustee
154 Patton Road
Woonsocket, RI 02895

QRN from the Editor

Computers can do almost anything, but one area that they have never been good at is decoding CW. Machine sent code is fairly easy for software to handle, but human sent CW makes most software choke.

But times are changing. I've been playing with MRP40, written by Norbert Pieper, and available at http://www.polar-electric.com/Morse/MRP40-EN/. It is surprising good at handling "real" CW. Not perfect, but better than anything I have reviewed to date.

My prediction is we will see sophisticated software capable of handling nearly any human copyable code in the 2012-13 time frame. 73! *Jim - WN1X*



NEXT MONTHLY MEETING

30 January - 7:30 PM

Landmark Rehabilitation Hospital

Route 146A

Woonsocket, RI