
An Introduction to the World of DX

The Text For This Page Was Written by a Great DXer; RON ZL2TT Who is Now a SK

To many newcomers to amateur radio DX is where it is "at". Many of them have "graduated" from the ranks of CB and the opportunity to be able to chase DX has been one of the major attractions of amateur radio to them.

So what is "DX "and why is it such a popular aspect of amateur radio?

"DX IS" sums it up for the real DXer. However for the newcomer DX is working long distances. Long distances are really what you want them to be. If you are new to the HF bands you may regard working VK (Australia) as DX. But if you are an experienced DXer you may consider working ZS (South Africa) is more what DX is about, especially if you do it on 80 or 160 MX, rather than on one of the higher bands like 20 MX.

The purpose of this article is really to give newcomers to the hobby a few pointers and to share my enthusiasm and that of other DXers with them in the hope that they will get the bug and join us in chasing DX.

So let's talk about gear first of all. What sort of station do you need to work "good" DX? Well basically anything will do, but obviously the better the gear, the better the antenna, the more likelihood you have to work DX. Yes you can work DX with 10 watts and a dipole antenna but a good antenna and rig makes it easier. You can do it with QRP (low power) say 5 watts but again running the full legal limit will enable you to be heard better, especially if there is QRM around.

Most DXers will agree with me when I say that the best investment you can make in your station is to have a good antenna system. This ideally should cover all the main HF bands. You need antennas for 80 and 40 but also for 20/15/10 and the WARC bands too. Now that the sunspot count is going up you will soon be able to work solid DX on 20,15 and 10 for many hours of the day. However, a good antenna for 80/40 is also very important. Getting the antennas as high up in the air as you can is critical. At 40 feet or so most antenna, especially beams, will really start to perform. Once you get really serious, and have the money and the space too, you can install some big mono band beams and be one of the big signals out of New Zealand. But you can start with a dipole or G5RV. Then as you get more enthusiastic or more frustrated, when you hear other ZLs working stations you can't even hear, you can advance to a bigger antenna system. The current theory is "go for height". Better a dipole at 100 feet than a beam at 20 feet. However I should say that I've worked close on 300 countries and never had an antenna over 35 feet on any band. But when I visit stations with big height antennas I can certainly notice the vast improvement over my set up. Still another principle of DXers is that they are never satisfied. The rig or antenna that last year was the best that money could buy and that you would never need to replace in a lifetime is starting to look like it needs an upgrade 12 months later.

Anyway lets talk about DX and the challenges that it can offer. DXing can be competitive and you can get recognition for your accomplishments in chasing DX through one of amateur radios' best known certificates. I am referring to belonging to the DX Century Club or DXCC as it is more commonly known. The ARRL in the USA award the DXCC to any amateur who can prove that they have worked amateurs in at least 100 different countries. 100 countries is only the start however. There are over 330 countries recognised by the ARRL DXCC Committee at the moment so real enthusiasts don't just have to stop at 100 countries. They try and work as many countries as there are and then aim to get onto the DXCC Honour Roll. This is a select group of amateurs who have worked just about every country in the world. There are a number of amateurs who have reached that level in New Zealand but the most famous of all was the late Jock White ZL2GX the first amateur in the world to work 300 countries.

Not satisfied with working 100 countries other DX enthusiasts try to obtain DXCC on 5 bands. This is called 5BDXCC. They can also try to get DXCC on CW, or QRP, or RTTY. The challenges never end if you want to chase DX and obtain awards and recognition for doing so.

So what constitutes a country for DXCC purposes? All of us know there are not really 300 countries in the world. In simple terms a country is any place the ARRL DXCC Committee wants to call a country. They have a number of criteria and the committee meets from time to time to discuss the status of different countries. Some new ones are added from time to time and others are deleted. New Zealand itself consists a number of countries. ZL7 Chatham Islands is a different country from New Zealand itself. Kermadec Island ZL8 is another country again. The Vatican State HV is a separate country, from Italy, for DXCC as is Hawaii KH6 a different country from the USA.

Full details of the countries that qualify for the DXCC award can be found in Callbook.

So you've decided that you want to chase DX. How do you go about it? In DX terms it's quite simple. You just listen, listen and then listen some more. Listening is about the best thing a prospective or even an expert

DXer can do. Listening will let you know for example what band conditions are like, what the propagation is like, when bands are open, which band it's best to use.

As in any other hobby it also pays to do some home work first. This includes talking to other people interested in chasing DX. There is sure to be some at your local radio club. You can meet them on the air or join one of the special DX nets where DX information is exchanged. There is a ZL DX net that meets every Friday night on 3600 KHz at 0730 UTC. There you will find a number of really keen DXers who will be only too pleased to share their DX knowledge with you. You will also find information in the DX column in Break In and in other similar amateur radio publications. Just about every amateur radio publication has a DX column of some form. This shows how popular DXing is all over the world. Just about everywhere you find amateurs you find keen DX enthusiasts.

Another way you can find out when DX is able to be contacted is by checking the propagation charts in Break In. They give a good indication of when bands are likely to be open to the most popular parts of the world. If you have a computer you can get programmes that allow you to do your own propagation forecasts. I have several inexpensive ones and I find they are mostly right about when I am likely to hear stations from other parts of the world.

Some people work DX just for the fun of it and are not interested in the competitive element of it or in obtaining QSL cards from the stations they have worked. They get a thrill out of talking to a fellow amateur in say Kenya and then being able to share that excitement with others. But your really keen DXers wants to obtain DXCC or get on the Honour Roll won't be happy until a QSL card from the exotic DX station is sitting on the table in front of them. Sometimes this can be expensive. As a DXer you will soon learn what an IRC is and what Green Stamps really are. They used to say in prison, so I am told, that cigarettes were a universal currency. In the world of DX the universal currency is IRCs and Green stamps. So what are they? An IRC is an International Reply Coupon. An IRC can be exchanged at your local post office for a stamp that will get your letter airmail to most parts of the world. It is not uncommon for you to have to send a couple of IRCs at \$1.80 each to a rare DX station overseas in the hope that you will get a QSL card back. Many IRCs are never given to post offices however. Rather like an extended game of pass the parcel they just seem to go from ham to ham all round the world. I have a number in my collection at the moment that go back to 1970 and I understand they are still in use. On the other hand there is a certain attraction about the use of Green stamps. They are US Dollars. In many countries Green stamps are more popular, and more exchangeable than IRCs. I have heard some hams complaining that they should not have to send IRCs or Green stamps and that the DXer at the other end should just meet the cost themselves. In an ideal world that would be true. However picture a ham in some rare location like Nepal getting say 1000 or 2000 QSL cards each month or even you getting that number yourself. Paying a dollar a time to send a QSL card back would soon become very expensive. Hence it is now accepted that if you want a QSL card, especially from a rare station, you may have to at least help to meet the cost of it being sent to you. Many hams use the QSL Bureau and NZART provides an excellent and free service for its members. But normally this is very slow. A year or two to get a QSL card is not at all uncommon. Many rare countries don't even have QSL bureaux. Others only let members use their QSL bureaux. The same applies with DXpeditions. This is when a group, but sometimes an individual, goes to some exotic location and activates it so that others can work a new country. These DXpeditions can cost big dollars. The DXpedition to ZL8 Kermadec Islands in May 1996, which I was part of, cost over \$40,000. With an estimated 40,000 QSL cards to send out too you can imagine the postage cost if we had to meet all those costs ourselves.

If you want to get a QSL card one of the most important and obvious things you can do to improve your QSL return rate is to fill in the QSL card correctly. Get the details on your card right. Band, mode, signal report and, most of all, the time. A convention amongst DXers is that they all use UTC or universal time. It is useless working a station in some rare location and sending a QSL card with the time listed as 8.30 PM New Zealand. Many DX stations if they can't easily find the contact in the log will just stick your QSL card in the rubbish. You must use UTC for all QSO times. Get the time right too. To get the UTC time listen to WWV on 5, 10 or 15 MHz. They announce the time every minute 24 hours a day so you can be sure your time will be right.

Learning a few key words in a foreign language will help too. Most overseas hams use English for making DX contacts so we take the use of English for granted. But you can guarantee that if you say a couple of words in the overseas station's language they will be pleased and comment on it. Even a simple Sayonra is welcomed by a ham in Japan. There are books and tapes in many languages designed for ham use and I am happy to give details if you contact me. Writing a few phrases on the back of QSL cards in the language spoken by that station you have worked seems to work wonders. A Russian ham saying "Kia Ora Kiwi" certainly gets my attention and improves that station's chances of getting a QSL card too.

There is a certain etiquette in working DX stations. It starts, of course, with listening to see who is on. A good tune round the bands will often locate new countries that you can call and work. Generally unless you have a

big station it's better to answer people who are calling than to call yourself although clearly it's not quite as simple as that. New Zealand is still regarded as a good DX catch for many overseas amateurs so a ZL calling CQ has got quite a good chance that some DX station will respond. It is a little less likely that this will occur if you live in a country full of amateurs like Japan or the USA, or you don't have a really big signal.

The first thing you must do when listening to a DX station calling CQ, for example, is see if they are giving a general or a directional call. A directional call is something like CQ Japan or CQ Africa. You are not likely to be too popular if you respond to such a call if you live in ZL. However if the station gives a general CQ call or calls CQ South Pacific then clearly that station is looking for contacts in this part of the world and you are welcome to respond. Sometimes the station will be working "split". That means the DX station will call on one frequency but listen on another frequency. This is so the frequency the DX station is using is not blotted out by all the stations calling on that one frequency. Listen carefully and respond on the correct frequency and you are likely to get an answer. Commonly DX stations will say "listening 5 up" or "listen 5 to 10 KHz up". You then have to transmit higher in frequency if you are to succeed in being heard.

Normally very rare DX stations are easy to find. The simplest way, especially if conditions are good, is just to listen to see if there are any particular frequencies where there appears to be sheer pandemonium. Thousands of stations, or so it seems, are all calling at the same time. This is called a pile up. And it can be very frustrating because normally in a pile up the DX station will answer the strongest stations first and it can take hours or even days before they appear to hear VK or ZL stations. A common frequency to hear pile ups and split frequency operation is 14195 or 21195. These are both very popular DX frequencies.

One way to beat the pile up is to join a DX net. These nets give DX operators the opportunity to work stations in a controlled way with a net control station who acts as MC and thus ensures that even the little stations get a crack at the DX stations. Some nets are well run and others could do with some improvements. Some people hate them, some love them but most, I think, would see them as a mixed blessing. DXing like any hobby does depend on individual integrity. You know if you had a genuine contact with the station. You know if the net control "helped" you beyond what they should have done and it is over to you to decide if you want to claim that contact or not. The best policy is, if in doubt don't claim it. Most nets, however, are well run. They guard their good reputations and don't want to put them into doubt.

There are a considerable number of DX nets that you can check into. They all welcome ZL stations. But two I like to use are the 14222 net at 0530 UTC and the ANZA (Australia New Zealand Africa net) that meets every day on 14164 at 0500. In both cases the net control is a VK or ZL station so you can be sure of a warm welcome. For new comers especially, these are an excellent way to get to work a lot of new countries in double quick time. Another good way is by taking part in contests. In March 1996 I took part in the CQ WW WPX contest. This is an all band contest with the aim to work as many different DX prefixes as you can. I worked over 1300 stations in 134 countries in 36 hours of operation over one weekend. If you are a new comer to DX then a contest like this one may get you a considerable number of new countries in a very short period of time.

I have met quite a number of DXers over the last few years. One thing I have found that many of them have in common is a clear focus. They set goals for themselves. My favourite example of goal setting is Graham ZL3NZ who set a goal of working 200 countries in just 20 weeks from the moment he got his licence. He got 198 countries during the period which is a terrific achievement.

If you live in the Wellington, Auckland or Christchurch area and you have packet radio you may be able to access your local packet cluster. This can be a good way to meet other DXers and exchange current DX information with them. I would also recommend that you do some reading. DX columns are good. There are also a number of magazines dedicated to just DX. On the Internet there is tons of DX information. There are also a number of books on how to improve your DXing skills. One I can recommend is The Complete DXer by Bob Locher W9KNI. A great book on DXing and techniques that even experts can learn from and it's available from NZART Upper Hutt.

DXing like any aspect of amateur radio is what you want it to be. You can work a few overseas countries to find out about what life is like there. You can get awards for working 100's of countries. You have the chance to compare your station with other stations in your area to see if you can get through first or even at all. You can do it 24 hours a day or an hour or so a week. One thing is sure DX is something you have to experience to appreciate. Chasing DX is not a bug but more an addictive disease!

If you are interested in finding out more about DX you can talk to one of your local DXers, join the ZL DX net or drop me a line. We are all keen to encourage more people to follow this exciting aspect of the hobby and to help you get the same fun out of it that we do.