

Dxing 101!

DX

...What is it?

Just two letters; but these two little letters have excited hundreds of thousands of hams worldwide, launched expeditions to countless exotic locations and been the catalyst for many countries around the world to tear down political barriers and allow their citizens to join the amateur radio community. DX stands for DISTANCE, but DX is a relative term: DX stations might be 2000 miles away on the HF bands, 200 miles on the VHF/UHF bands, or 20 miles at microwave frequencies. Most DXers gained their experience on the HF bands from 160 meters to 10 meters. And, although those bands are what this brochure will concentrate on, all DXers share a common characteristic: the thrill of the chase, and capturing a QSO with someone who is far, far away. For us, it's exciting to snag a new country or new island, or even a new grid square, by digging a callsign and signal report out from behind a wall of noise and interference. There's just something special about snagging a contact with a guy in New Guinea, Japan, Pakistan or Sweden using your own rig and antennas that is hard to beat!

...What do YOU need to work it?

You do not need a big station to work DX. A surprising amount of DX has been worked from modest stations with meager antennas. A basic transceiver and some good dipoles will get you going in DXing. Some NADXC members have gotten to the 300 country level using 5 watts! Build your station as your interest and finances dictate. Adding a little more power or putting up a beam will improve your score, but if that's not in the cards, you can still work a lot of stuff with a minimal station. Concentrate on improving your listening ability and your operating technique; it will pay handsome dividends, especially if you don't have the loudest signal on the band.

...Where Do You Find It?

On the HF (High-Frequency) bands, you'll find DX signals on all modes including SSB, CW, digital (RITTY, Pactor, Amtor, Packet), SSTV(Slow Scan TV) and ATV(Amateur TV), and even FM(but rarely).

For the past several years, during the recent lull in the seven-year sunspot cycle, DX could be heard on the "high-bands" (20-10 meters) only during daylight hours, and on the "low-bands" (160, 80/75, and 40 meters) only during nighttime hours. This is because energy radiated from the Sun during sunspot activity affects radio propagation (the way our atmosphere reflects and refracts radio signals), and sunspots have been on the decline until just recently. So, as the Sun becomes more active over the next three or four years, it will be easier than ever to find exotic DX on all our HF bands. The new solar cycle (cycle 23) has already begun to get DXers around the world excited with the prospects of "easy pickin's" nearly any hour of the day on many of the HF bands. For now (Summer '98), try 20 or 17 meters during morning, evening and late night times. Fifteen and Ten meters are usually best for Europe near daybreak and for the Pacific at dusk, and are sometimes open to Africa & Asia mid-day, while the low-bands (160-40) will be open, but noisy, at night. As Fall approaches and the Sun angle changes, the low bands will become quieter and you'll be able to

hear DX there, too. At the peak of the cycle, a couple years off, the high-bands, especially 10 meters, will allow round-the-world contacts with really low power and modest antennas. If you haven't heard 10 meters filled wall-to-wall with strong DX stations, you have a real treat in store! Contrary to what many people think, working DX is not difficult, and the more you work, the more you will sharpen your skills. You will learn about equipment, antennas, QSLing, propagation, pileup technique, operating etiquette, and before you know it, you, too, will be a DXer!

Look for DX here:

Band Characteristics Where's the DX?

160 Late evening/night; best in winter 1820-1850 kHz.

80/75 Late evening/night, early morning; best in winter CW: 3500-3530; SSB: see SPLIT

40 Early evening through early morning; Fall through Spring CW: 7000-7030; SSB: see SPLIT

30 Sometimes like 40, sometimes like 20. Try it! CW and digital only; mixed anywhere

20 Open somewhere 24 hours, best Fall through Spring CW: 14.000-14.040; SSB: 14.150-14.250

17 Sometimes like 20, sometimes like 15. Days/Eve. CW: 18.068-18.100; SSB: 18.110-18.168

15 Daybreak to Noon: Europe/Africa, CW: 21.000-21.150; SSB: 21.150-21.350 Midday to Evening: Asia /Pacific

12 Sometimes like 15, Sometimes like 10. Try it! CW: 24.090-24.930; SSB: 24.930-24.990

10 Lots of surprises! Dawn & Dusk best but improving! CW: 28.000-28.100; SSB: 28.300 & up

Start tuning around your favorite band on the frequencies your license class permits – no use getting frustrated listening to all that good stuff down in the Extra Class band if you can't work there. But it certainly does provide an incentive to upgrade!

The most fun is to prove these predictions wrong! Band openings to a specific part of the world can sometimes really be surprising and interesting. A good DXer is a good Short Wave Listener FIRST. Listen, Listen, Listen! Tune, Tune, Tune!

..How Do You Work It?

Casual DXing is usually done like any other QSO. For example: a short response to a CQ, using your full callsign on the DX station's frequency should result in a nice conversation. Many DX operators speak English fairly well, and can at least exchange name, location, signal report, and often will enjoy a nice ragchew. CW operators can use Q-signals even if they don't share a common language. If you're on SSB, give a few short calls on his frequency using International phonetics that your DX target is likely to understand: "Kilo Foxtrot Four Zanzibar Tango Sierra" is

a lot more easily understood than "Kilo Fox Four Zany Tennis Shoes". Speak slowly and clearly -- none of the cutesy stuff.

Split operation: On some bands and modes, U.S. stations cannot transmit where the DX station can, so you'll often hear the DX station announce a 'listening frequency'. For example, F2XXX in France, CQ'ing on 7035 might say "listening 7130". That's your cue to set up your rig for split operation with each of two VFO's on a separate frequency. You listen on his transmit frequency and he listens on your transmit frequency. It's a little like repeater splits, but with freedom to pick your own (legal) frequencies. This can get a little tricky until you become comfortable with the way your particular rig works in split mode. After a while it'll be second nature, but at first, listen to how other ops are handling it.

Rare DX: Sometimes a place with few or no active hams will be visited by a "DX-pedition" with operators, equipment and antennas ready to put a "new country" on the air for the benefit of DXers around the world. Or, perhaps it's just a case of a less rare area with especially good propagation. Whatever the reason, you'll know something's up, because there will be a whole group of stations calling the DX all at the same time. This is affectionately known as a pile-up. The size of the pile will be an indication of the rarity of the DX! Pileups require a little technique...here's where you can gain a real advantage by using a little knowledge and planning:

Plan to go split: The DX will usually try to move the pile away from his transmit frequency in order to be heard over the masses, so be ready to transmit where he's listening. It makes no sense to call him on his own frequency once he says "listening UP TEN", or "200 to 220", or just "UP"!

Get in step: The DX op will try to catch one complete callsign from the pile on the first call, and will try to establish a rhythm that benefits everyone with a lot of contacts during the time propagation is in our favor. So send just your full call once, with STANDARD phonetics, on his listening frequency, then listen for his response.

Play the pileup: If you can figure out what his tuning pattern is, you can often anticipate where he'll be listening next in the pile, and slip your call right in. This works, but takes some patience. If it's a small pile, you can try picking a spot just on the edge...move around a little. Try to be noticed. Does it sound like Bass fishing? Yup.

Time your calls: Sometimes a little delay (a second or two) will let your call stand out among the rest as they taper off. Really experienced operators seem to have a knack for sensing the most opportune time to throw out their call. This is a pretty subtle skill that will pay off if practiced.

Follow his lead: If the DX op wants the pile to move, spread out, squeeze up, go by numbers, speed up, slow down...whatever...do it (legally). On CW, try to respond at his speed.

Don't react to others: Don't be tempted to be a traffic cop by telling others they are on the "wrong vfo" or "up, lid!" All this does is add to the problem. If you hear an obvious jammer, work around him; he wants to get a rise out of us, and he is thwarted when we IGNORE him. Patience! Discipline!

Don't be discouraged: Busting pileups on the first or second call is for the "BIG GUNS". The rest of us "little pistols" have to replace brute power with skill and cunning. You Can Do It. Too! Be patient. Listen. Figure out how the guy is playing the pile. Listen, Listen, Listen and LEARN.

..Now What?

You've done it..you worked the DX..so? Most DX chasers like to have a QSL card to confirm the deed, and if you want to apply for any of the many DX awards offered by the world ham community, you'll need that confirmation. The most prestigious and sought after award is ARRL's DX Century Club (DXCC), awarded for confirming contact with 100 different "entities" (call them countries, for now). There are over three-hundred 'countries' identified for DXCC purposes, and most are inhabited by active hams, so the first hundred is attainable with even the most modest station..especially in the next few years. If you become hooked on collecting countries, you'll join a huge group of like-minded DXers around the world who think this is the most exciting and challenging aspect of ham radio, and who will welcome you as a member of their fraternity. You don't need to be a big-gun; you don't even need a hundred countries..just the desire and interest will identify you as a DXer!

..How Do You Get Help?

Elmers- You may already know what an Elmer is – a nickname for someone who is really helpful at showing you the ropes. North Alabama DX Club abounds with them, and we love to help out beginning DXers with advice, tips, technical help, and moral support. We love to watch 'em grow!

WWW- There are lots of DX-oriented sites on the Internet. We have our own that is open to everyone (www.nadxc.org). Other prominent sites include those sponsored by the Texas DX Society, Potomac Valley Radio Club, Northern California DX Club, several European and Asian sites. All are easy to use, have helpful tips and info, and have lots of links to data, software, propagation forecasts and news.

Magazines- DX Publications abound. They run the gamut from weekly advisory DX bulletins, monthly columns in QST, slick magazine DX publications like THE DX Bulletin. NADXC also publishes a monthly summary of current DX happenings in our own monthly LONGPATH.

Clusters- Packet Clusters are an excellent help to the new or seasoned DXer. Packet Clusters are networks that link up cities into large spotting networks. Hook in to our own local one on 144.93 or 145.73 and watch your screen for awhile. You will get the hang of it in a hurry. DX alerts (Spots) will appear from DXers all over the Southeast telling you what the callsign and frequency is of something they just spotted. There are also lots of other aids there, like current propagation info, an online callbook, help with hard-to-identify prefixes, QSL advice, and a QSL manager's directory. Talk to W4NS for more info.

NADXC-The North Alabama DX Club is one of the oldest DX organizations in the South. They meet once a month at a Huntsville area restaurant, sponsor two 2-meter repeaters (147.30/90, and

147.10/70) for providing DX info, a terrific Webpage (www.nadxc.org) on the internet, as well as the Packet Cluster. Dues are nominal, and they are a super helpful group. They'll help get you started on the right track, offer you a helping hand, and even tell you what traps to avoid right from the start.

Publications- Check out the stuff in ARRL's Operating Manual, the ARRL handbook, the ARRL Antenna Handbook, or any of the others in the list of good ARRL publications. There's help there on any subject you can think of. Don't forget to get yourself a copy of the ARRL DXCC Countries List and see what countries, islands and other entities count for your country totals.