W9DXCC

DX UNIVERSITY and NIDXA PERESENT

DX'ing FROM the BLACK HOLE 2

SESSION THREE

STATION SOFTWARE and DX INFORMATION







Station Software and DX Information

Introduction

In this session, we assume that you are using a computer in conjunction with your ham radio activities. Although Apple versions of some software may be available, this session will cover software designed for Microsoft Windows.

Although it is ideal to have your station computer interfaced to your transceiver, it is not necessary to do so to obtain some of the benefits of the software that will be discussed in this session.

By utilizing the many software tools included in this session, you can optimize your operating skills and level the playing field with stations that rely solely on big antennas, tall towers and high power to work the rare ones.









Station Software and DX Information

What we will cover today

- Computer Logging
- Other Station Software
- Internet Logging
- Internet DX tools
- How do I use all this information to compete with the big guns?







Why Computer Logging?



Your paper logbook still works — just don't misplace it, burn it and spill anything on it. If you have to find a certain QSO from several years ago, be sure you have a big pot of coffee available — it will take some time to find anything.

Today's computer logging programs do so much more than simply log contacts. If you are going to be a DX-er, you need computer logging. You will make fewer errors and enjoy the hobby to its fullest. The software that is available is incredibly flexible and some of the best programs are free – there is literally no excuse to not use computer logging.

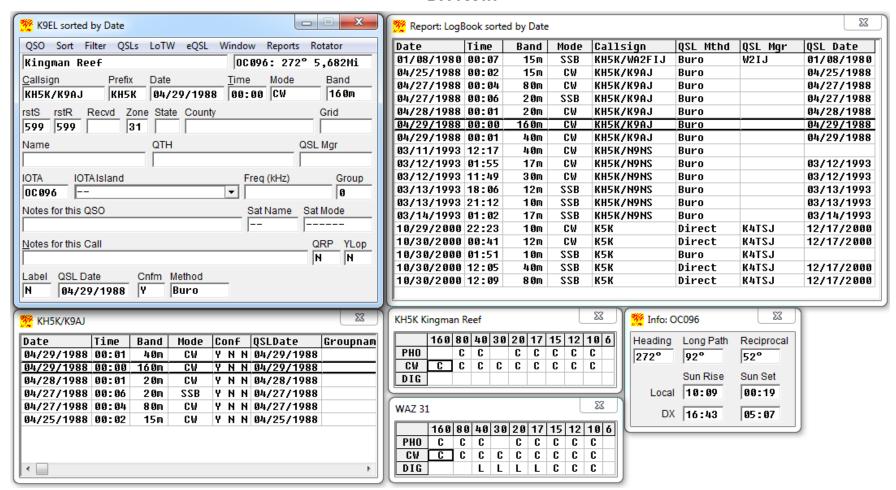






Example of Computer Logging Program

DX4Win









Some popular computer logging programs







Each of these programs will record all of your QSO information and interface to your radio for a truly electronic logbook. Each program performs those tasks differently and vary in price from FREE to \$129. Most of them go beyond just logging and many will handle reporting, QSLing, digital modes, maps, DX Cluster, LOTW, remote station control, and many other capabilities. Some are updated on a regular basis and some are subscription based. eham.net lists over 100 logging programs!







How do I choose a logging program?

Ask 10 hams to say which logging program is the best and you will likely get 10 different responses!

Even the paid programs allow free demos, so trying before you buy is quite easy. Here's what to consider when looking for a logging program:

- 1. Features Make a list of your "must-have" features and immediately eliminate any programs that do not include your must-haves.
- 2. Updates Do you change equipment and software often? Or do you hold onto everything for years. Check which programs are updated regularly and if fees are required for the updates.
- 3. Support Check the Support capabilities. The Yahoo groups are nice, but nothing beats being able to communicate directly with the author.
- 4. Commitment Are you planning to hold onto the software once you learn it? Is the author in business for the long haul or was it just a pet project?
- 5. Price Are you willing to pay for your software and possible annual updates? Or do you want to try some of the free offerings.









Logging program features to consider

Basic logging

- Record callsign, operator name, country, zone, time, mode, RS(T), date and band of QSO
- Additional info including state, county, grid, IOTA, actual frequency (including split)

Real time information to be supplied when a callsign is first entered

- Country name, prefix and CQ zone is immediately displayed
- Any previous contacts plus operators name
- Current award status for that country/zone is it a new one? DXCC? WAZ? WPX? Mode?
- Status of QSLing for that station did I send a QSL? How? QSL received? When?
- Map showing distance and day/night divider

Internet Interface

- Display all spots from PacketCluster sites countries or zones needed should be highlighted
- Post DX spots to the Internet for DX stations you hear
- Automatically look up station's Name, QTH, Address, QSL Manager and other info

Control devices connected to the computer

- Radio interface allows automatic recording of Frequency, band, mode info
- Rotator interface allows automatic positioning of directional antennas based on callsign
- Frequency interface allows automatic tuning of amplifiers and antennas
- Use computer keyboard to send CW, PSK, RTTY, etc and decode on monitor









Protect your data!!

Every computer hard drive will fail – at some point in time. You MUST have a plan for multiple, regular backups. Logging programs may use a single file or multiple files – find out what files need to be backed up. Most logging programs offer some form of backup, but it is usually on the same hard drive. Backup your data weekly to an external hard drive or network drive, AND backup daily to a USB stick. The backup software that comes with Windows XP and later will work just fine for this purpose.

Update your software and databases!!

The best logging software is only as good as its database. Prefix assignments change regularly, so new callsigns are always appearing. Besides the main data records of your actual contacts and QSLing, most logging programs have separate files for country databases, IOTA database, prefixes, QSL managers, awards, etc. etc. It is crucial to keep your databases accurate and up to date.

And ALWAYS run the latest version of your logging program as well to pick up new features and bug fixes.









Other Station Software

DX PACKET SPOTS — The second most important piece of software for the DX-er is a program to receive DX packet spots. Almost every modern logging program includes DX spot software and can also check those DX spots against your logbook database for needed countries, zones, IOTA, or whatever award you are chasing. However, for maximum flexibility many DXers use a standalone DX spots program that integrates with most logging programs. CC User by VE7CC (http://www.ve7cc.net/) has more flexibility and options to control and filter DX spots than most logging programs.

RADIO CONTROL – If you use your radio locally, i.e., next to your computer, all the logging programs will properly read band and mode data directly from your radio and enter it into your log. To save valuable time when a needed DX station appears, your radio can be automatically set to the right frequency and mode just by clicking on the DX spot. If you are going to operate remote, or want to control every aspect of your radio via the computer, there are programs such as HRD (Ham Radio Deluxe) that can do this, but most manufacturers provide free software to control their radios. Serial port sharing software exists that allow both a radio control program and a logging program to access the same serial port at the same time. (http://www.eterlogic.com/Products.VSPE.html)







Other Station Software, con't

COMPUTER MODES – The variety and type of programs available make it impossible to list everything here. If you are interested in primarily one specific mode – say SSTV – then it is best to obtain a specialized SSTV program such as MMSSTV - http://hamsoft.ca/paqes/mmsstv.php. Paul, K9NU, will cover digital dx-ing in the next section, but one of the more popular programs for RTTY is MMTTY - http://hamsoft.ca/paqes/mmtty.php. Many of the logging programs actually utilize MMTTY to provide some RTTY capability. For digital modes such as PSK, there are many programs available. One of the most popular programs for digital operation is fldigi: http://www.w1hkj.com/Fldigi.html.

STATION CONTROL — Besides controlling your transceiver, you can also integrate your amplifier and rotator into the computer. Clicking on a DX spot can tune your amplifier and rotate your antenna to the correct beam heading! Perhaps you prefer to send CW from your keyboard or want to utilize a series of pre-recorded voice messages — all are possible with your computer.







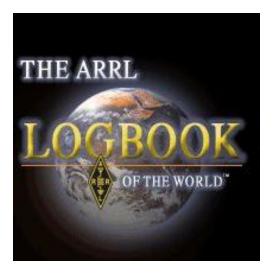


Internet Logging



Clublog is not a real time logging system, but a service that collects and stores logging information from anyone who uploads their log data. Clublog usage is free and offers a very large array of features and capability, most notably DX leaderboards and OQRS. OQRS was covered in QSLing session.

For details, go to www.clublog.org



LOTW is more than an online logging system and is run by the ARRL. LOTW details were covered in the QSLing session.

For details, go to: https://p1k.arrl.org/lotwuser/default

Both of these online log tools can help you work DX – they are not just for logging and QSLing.







Internet DX Tools

There is an incredible amount of resources available online to DX-ers, and it would be impossible to review or even mention them all. Today we will review a few of them that are readily available and very useful to North American DX-ers.

The Sites we will cover today include:

DX Spot Archive - http://www.dxsummit.fi/Search.aspx

Skimmers – http://www.reversebeacon.net/main.php

DX Maps - http://www.dxmaps.com/spots/map.php

ClubLog - https://secure.clublog.org/about.php

Daily DX - http://www.dailydx.com/

DX World - http://dx-world.net/

QRZ – http://www.grz.com/

Online Logs - http://dx.qsl.net/logs/

NG3K - http://www.ng3k.com/

DX Zone - http://www.dxzone.com/catalog/DX_Resources/

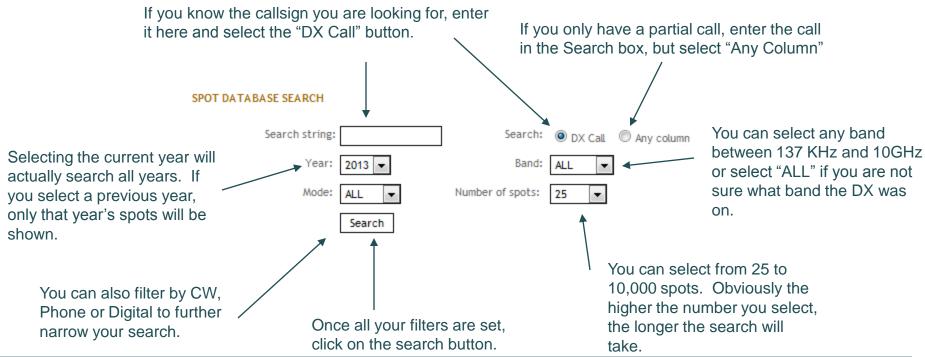






DX Spot Archive

DX Spot Archive – Spot scrolled off your screen? Can't remember what time the DX was active? Search the DX Spot archive. This is one of the very best tools you must have in your DX arsenal. Here is a screen shot and some explanations:









DX Spot Archive Typical Output

» SPOT DATABASE SEARCH



KE4WBO	1828.0 FS/K9EL	tu John 73, up 1	0345 28 Nov	St. Martin
W2IRT	1828.0 FS/K9EL	QSX 1829.05	0332 28 Nov	St. Martin
VE3CV	1828.0 FS/K9EL	Up 1	0324 28 Nov	St. Martin
K9CT	1828.0 FS/K9EL	QSX 1829.00	0318 28 Nov	St. Martin
N4SC-@	1825.9 FS/K9EL	John, QSX 1.827 hvy QSB & weak sig	0443 27 Nov	St. Martin
WERLL	1826.0 FS/K9EL	1.827.00	0421 27 Nov	St. Martin
W3LPL	1826.0 FS/K9EL		0414 27 Nov	St. Martin
VA3CDX	1826.0 FS/K9EL	listen 1827	0350 27 Nov	St. Martin
VASCDX	1826.0 FS/K9EL	QRX 5 minutes	0334 27 Nov	St. Martin
K9QVB	1826.1 FS/K9EL	up 1	0318 27 Nov	St. Martin
W3LPL	1826.0 FS/K9EL		0310 27 Nov	St. Martin
VASMW	1826.0 FS/K9EL	QSX 1827.1	0259 27 Nov	St. Martin
KB0E0	1825.9 FS/K9EL	Up 1+ he finally came up :-)	0255 27 Nov	St. Martin
AA9A	1826.0 FS/K9EL	up	0223 27 Nov	St. Martin
WS9V	1826.0 FS/K9EL	up 1	0217 27 Nov	St. Martin
W3LPL	1826.0 FS/K9EL		0207 27 Nov	St. Martin
VA3CDX	1829.0 FS/K9EL	Tnx report from MA	0350 26 Nov	St. Martin
K3FGO	1829.1 FS/K9EL	John, Nice sigs in MA	0349 26 Nov	St. Martin
VA3CDX	1829.0 FS/K9EL	CQ CQ	0342 26 Nov	St. Martin
VA3CDX	1827.9 FS/K9EL	up 1	0417 23 Nov	St. Martin
W3LPL	1827.9 FS/K9EL		0404 23 Nov	St. Martin
WBUVZ	1828.0 FS/K9EL	CQ	0403 23 Nov	St. Martin
F5NTV	1822.0 FS/K9EL	PSE 160M !!!	0257 23 Nov	St. Martin
K5VIP	1830.0 FS/K9EL		0213 23 Nov	St. Martin
WK3N-@	1829.0 FS/K9EL	freq correction Sri	0200 23 Nov	St. Martin
W4TUN	1829.0 FS/K9EL	tnx for band number 3!!!!	0150 23 Nov	St. Martin
W1RM	1829.0 FS/K9EL	QSX 1830.00	0137 23 Nov	St. Martin

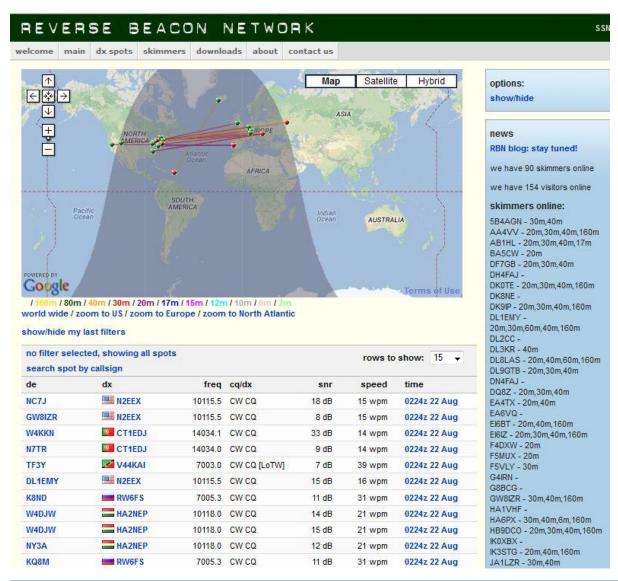
Conclusion: 0200-0400Z is the best time to work FS/K9EL on 160M and he is usually near 1829 KHz







Skimmers



Skimmers – automated receivers that scan an entire band, decode the CW signals and publish the results. You can build your own skimmer using software from VE3NEA, or use the incredible online resources of the Reverse Beacon Network. How can you beat 90 receivers online worldwide?

Here is a sample output, but results can be filtered by band. Try it out! Call CQ and watch your callsign appear – you may be surprised how many places are receiving your signal!

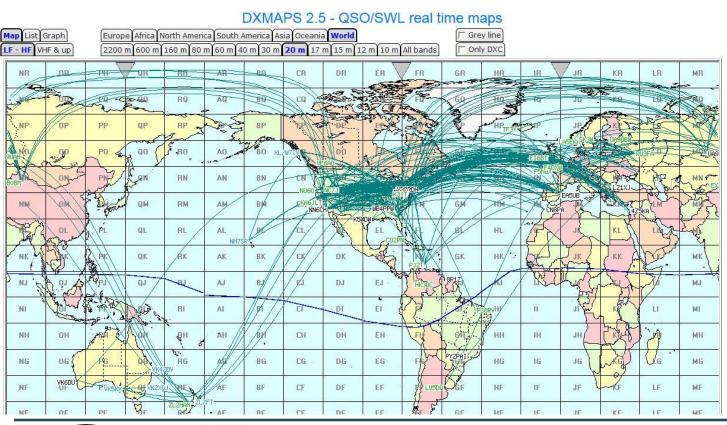






DX Maps

Did you ever think about taking all those DX spots on the packet cluster and plotting them on a world map? Well, don't bother as it has already been done. The DX Maps website can show you instantly stations that are active and where the propagation is occurring. You can filter by band and by region, so it is a very powerful tool.



This is 20M at 0230Z on 21
Aug – great time to work
EU or Russia, but clearly the band is not to
South America or Japan

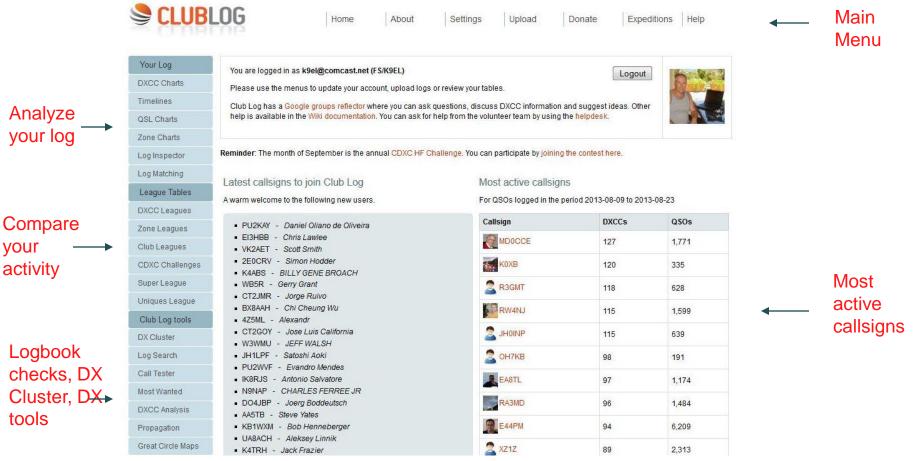






Club Log

Club Log is a free website that hosts a database of logs uploaded by anyone who chooses to do so. It has become very popular and recently received external funding. There are many, many useful tools for the active DX-er.









Club Log – Leaderboard Sample



Statistics

Geo Propagation NEW

About Club Log | Most Wanted 2013 | List All Expeditions

Soapbox

FS/K9EL

Log is updated daily

Beam heading: 0° SR/SS: 09:55Z / 22:34Z Last QSO in database: 2013-06-28 22:39:55

Main Menu



K9NB has worked FS/K9EL on 23 out of 27 band slots

Spots

Propagation suggestions for FS/K9EL from UNITED STATES OF AMERICA (Z4) or from CQ zone 4 or show on Geo Propagation Map

Leaderboard stations in CQ zone 4 or UNITED STATES OF AMERICA (Z4) or in NA or in Club: NIDXA - Northern Illinois DX Association

Band-Mode checklist



Request QSL

Your search has been made possible thanks to a donation made by PT9ZE JOSE ALFREDO BUAINAIN.

Embed this tool in your site

15194 searches. Completed your search in 0.302s

Leading Band/Slot Stations

1	WK3N	26	21	W7DN	13	41	DL3GD	11	61	N4FW	10	81	KB8VAO	9
2	K9NB	23	22	K9RJ	12	42	A65CA	11	62	W9AV	10	82	NI3K	9
3	EA1DR	18	23	DL5YEE	12	43	W3YX	10	63	CT1AOZ	10	83	W2YC	9
4	OK2PAY	18	24	K5EK	12	44	CT1HMN	10	64	KA2EYH	10	84	UT2GW	9
5	YV8AD	16	25	N4SC	12	45	IK00ZD	10	65	W4MOT	9	85	S51DV	9
6	VE3CRG	16	26	ON4AXU	12	46	G4EZT	10	66	W2Q0	9	86	IW0HEX	9
7	NADW	46	27	Waky	40	47	EVERT	40	67	KADV	0	07	LITOET	0

DX Hogs







Daily DX

The Daily DX is an paid subscription service that provides a daily (5 days per week) update on DX activities. Bernie W3UR is editor and has a vast network of people who provide him information. His service is the most reliable and current source of DX news. Instant updates are available via Twitter.









DX World

DX World is an excellent website for DX news. The authors have some excellent connections and often are the first ones to release information on new operations. It is also very colorful and easy to read, plus an excellent index to past articles.



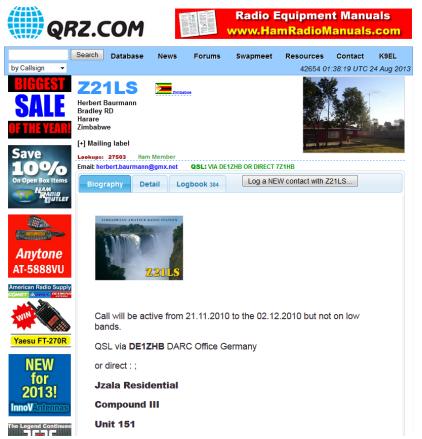


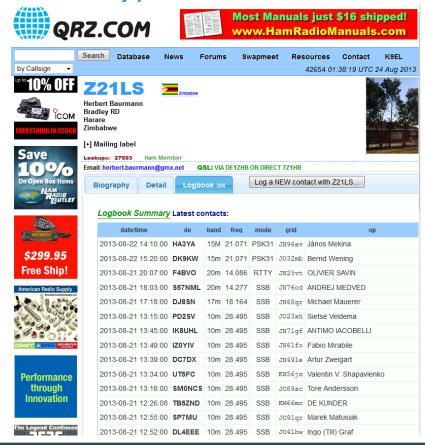




QRZ

QRZ.com is oone of the most popular ham radio websites. Not only are you able to find name, QTH and other pertinent info on the Biography tab, but many people also submit log info on the Logbook tab. This is a great way to see if that station has been active at a certain time or on a certain band of your interest.









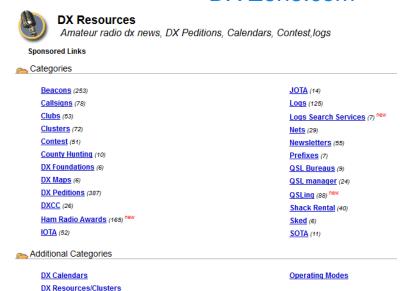


Other Useful DX Sites

Log Search of over 2000 logs

This page contains an index of ham radio logs hosted on DX.QSL.NET. We currently host over 2,000 amateur radio logs from over 100 different countries. If you would like to put your ham radio log on DX.QSL.NET, click here for information. Ham Radio Logs hosted on DX.QSL.NET There are 30,510,241 QSOs online! There have been 60,091,057 searches performed Click here to view the Master Ham Radio Log Index Select a log from the list below and type in the callsign to search for, or click on a callsign of one of the recently added or updated ham radio logs to bring up a search form for that log. Select a Log: EW2EO Callsign: Search Log Clear Callsign

DX Zone.com



NG3K's super site of DX and contest info





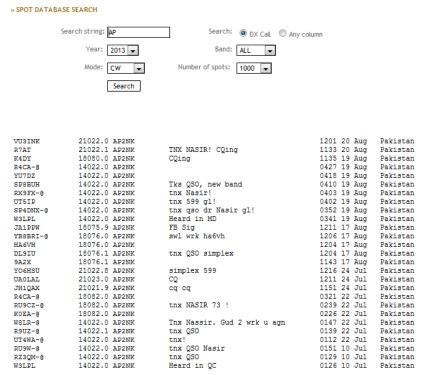




Put it all together!

Wow – there is a lot of information available – but how do I use it all?

Let's say you really need AP on CW. You don't care what band. First, check the bulletins for any mentions of AP (use the VE3NEA bulletin search tool) to see if there any announced DXpeditions. Rats – none.



Second - use the DX spot history to get the callsigns of active AP stations on CW.

The search results tell us that AP2NK is the only station recently active on CW. He favors 022 on 20 and 15 and 080 on 17. Although most spots are from EU, some are from NA. He seems to favor Mon, Tue, Wed.







Put it all together! Part 2

Third - check QRZ.com for any info. No operating info listed, but he does list an email address – good if you need to ask for a sked.



Fourth – Enter AP2NK in your DX spotting program to make sure all spots for AP2NK alert you. Some programs can even send you a text message. Also enter AP2NK in the Reverse Beacon watchlist. Skimmers will alert to a station's presence immediately. By the time someone spots the DX on packet, it may already be too late! Based on the few USA spots, you can assume his signal will be weak.

Then – listen, listen! You now know his normal operating frequencies, times, bands and even days of the week. You know he calls CQ, so the skimmers will hear him and alert you before he even stops sending CQ! You will be the first in the log!









Questions??





