

## Getting Started on HF



Part 2 – Electronic Logging

Al Walters – K5NOF k5nof@arrl.net

Director
Kendall Amateur Radio Society









# Part 2 Electronic Logging



- Part 2 How to get started with electronic logging.
  - Convert paper logs to digital format.
  - Logging software.
  - Logbook of the World (LoTW), eQsl and Club Log in addition to QSL cards.



### Electronic Logging



- Amateurs are moving to electronic logging using a laptop or desk top PC.
  - Whatever, try to dedicate one to your station; and old one will do.
  - I run Win7 on my ham machine with multiple USB ports installed.
  - Use USB to Serial converters for my legacy equipment.
  - You will not need high processing speed nor a lot of RAM.
  - Ham radio software is not a resource hog.
  - Software is discussed in this section and you are going to want to use it.
  - For now, know that you will want a package which will work easily with your radio, connect to a DX spotting network, and which you can use with LoTW and Club Log. More about all of this as we continue.



#### **Software Overview**



- Basic Log Import
  - Manually enter 100 QSO's at a time.
  - Convert to ADIF format
  - Import into logging program to build an electronic log.
- LoTW
  - A relational data base that compares your QSO's (call, time, frequency) with others (call, time, frequency) for a match.
- Other Neat Stuff: DX Tool Box, Digipan, MMTTY
- DX4Win www.dx4win.com
  - Will cost \$90 but
    - Full of features, has users' manual, very active reflector for users, supported by developers and AD1C. Needs to be updated for new digital modes.
    - LoTW support
    - Major upgrade from one version to another -- \$30.
- Writelog www.writelog.com
  - Initial cost \$30.
  - Upgraded periodically.
  - Supports any CW, SSB or RTTY contest
    - Focus moving toward RTTY and away from CW.
    - Full of features, has users' manual, very active reflector for users, supported by developers with regular updates.
    - LoTW support
    - Many use Writelog for general logging
      - but has none of the award tracking features of DX4Win.
    - Annual maintenance fee -- \$30.
    - Newbe starter package -- \$18.
- Introduction to each



## Why?



#### Convert paper logs to digital (ADIF) format?

Then you can upload your logs to LoTW, Club Log, eQSL for QSO confirmation and award credit.

Use Logbook of the World(LoTW) and eQSL in addition to QSL cards?

- LoTW is world-wide standard for ARRL awards.
  - Paper QSL's automatically added to this record when approved.
  - eQSL accepted for CQ awards. Not accepted by ARRL.
- Fast confirmations at low cost (ARRL also charges for the award).
- Club Log for on-line QSL requests.

#### Use logging software?

- Log becomes electronic data base which supports.
- LoTW , Club Log & eQSL upload and download.
- Provides QSL management and different award tracking.

#### Participate in Contests?

- Build personal proficiency
- Work states and countries needed for various awards.

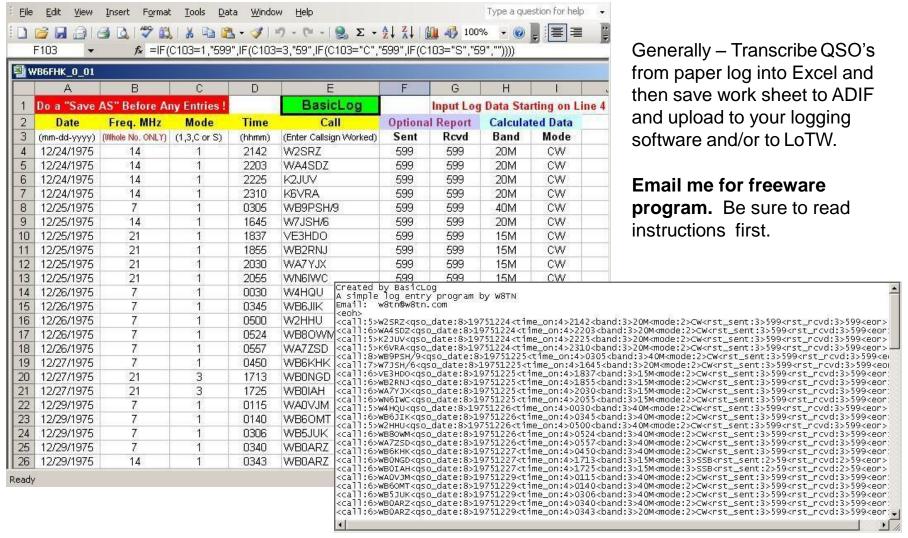
#### **Use Contest Software?**

- Beats paper and pencil and dupe sheet.
- Can't compete without it.



#### **Basic Log Import**







#### LoTW



# General Steps (See <a href="www.arrl.org">www.arrl.org</a> for instructions).

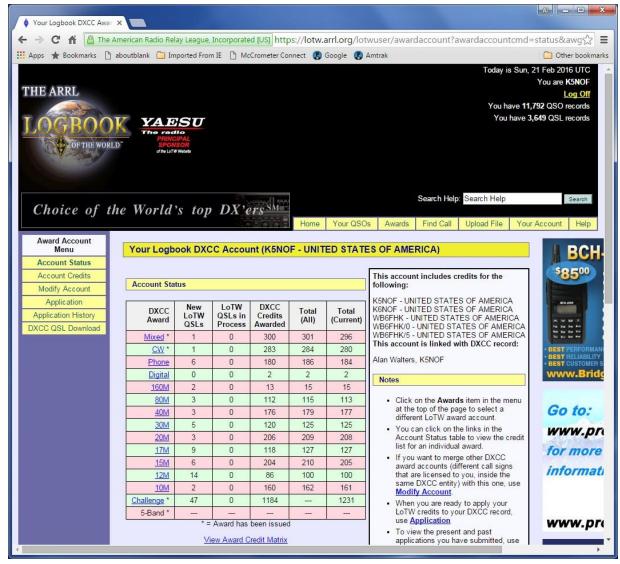
- Download and print the instructions
- Download and install the software.
- Request a certificate for your callsign.
- Authenticate your location.
- Load your certificate (TQ6 file).
- Create a station location.
- Sign and upload your log files.

Follow the instructions step by step.



# LoTW Showing the K5NOF account





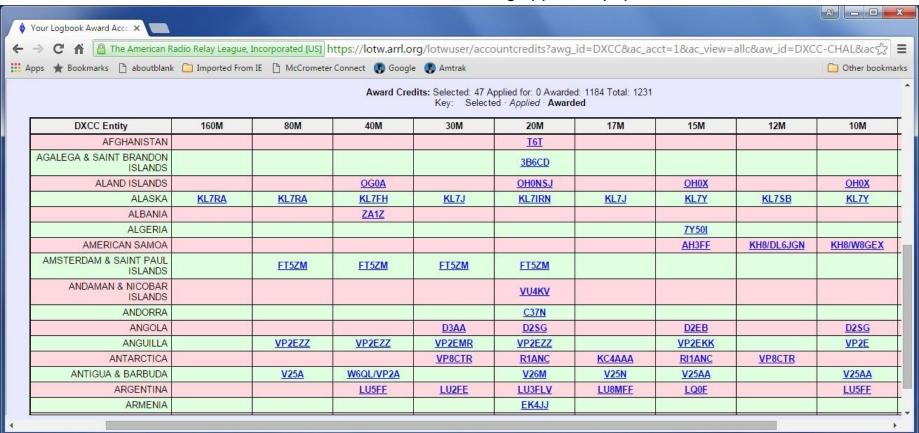


#### **Example of LoTW Award Credits**



# Partial report from the K5NOF DX Challenge Account

LoTW Shows all DX credits including approved paper QSL's.



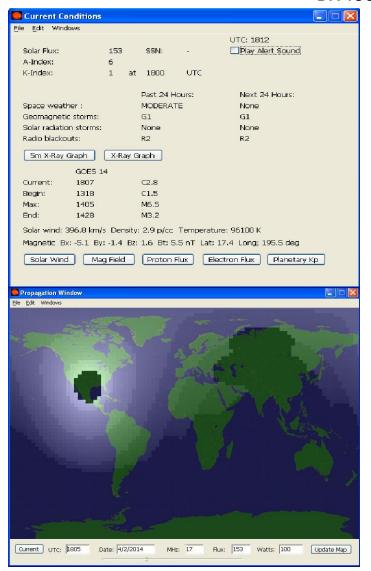
Your credits from paper QSL's are combined with digital QSL's from members.

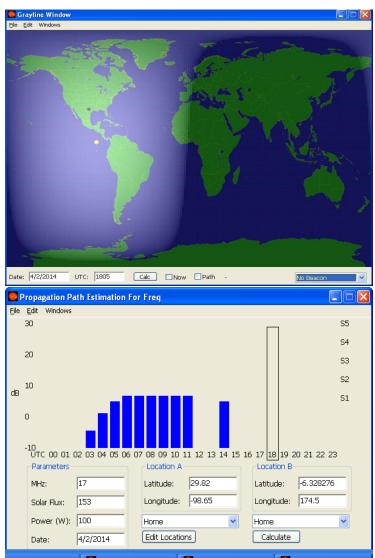


#### Other Neat Stuff



#### DX Toolbox

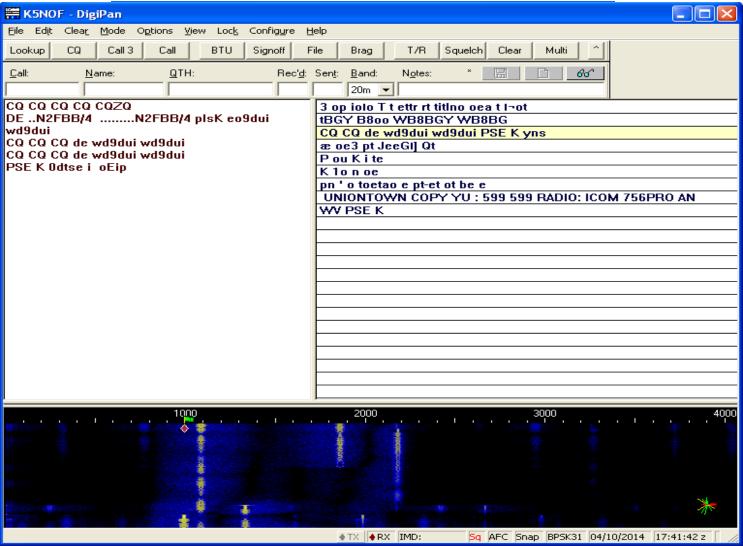






## Digipan

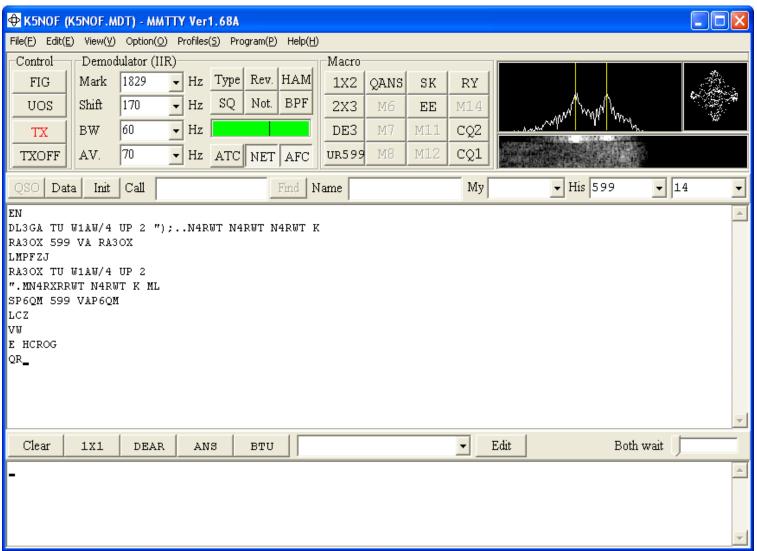






#### **MMTTY**







### **DX4Win Logging Software**



\$95

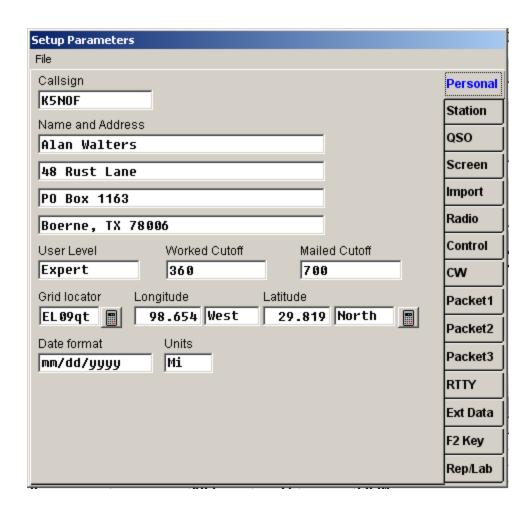
- Full of features
  - Packet terminal
  - Packet spots
  - Band map
  - Call sign information (country, heading, distance, QSL manager, etc.)
  - Use for general QSO's, working DX, casual participation in contests.
  - Program includes PSK31 utilities similar to DIGIPAN.
  - MMTTY RTTY engine integrates into program.
  - Uses onboard and/or off board sound card (s).
  - Print labels and manage QSL cards.
  - Upload/download to/from LoTW.
  - Upload/download to/from eQSL.
  - Award tracking
- Just to name a few.
- See <u>www.dx4win.com</u> for more information.



### **DX4Win Setup Tabs**



- Use these series of tabs to tell DX4Win how you want the program to operate:
  - Station capabilities
  - Defaults for a new QSO
  - Preferred fonts
  - Import parameters
  - Radio (s). Can be setup for SO2R.
  - Band decoders
  - Rotor control
  - Antenna control
  - CW generation via serial or parallel.
  - How to handle packet spots.
  - Setup for RTTY.
  - External call sign data base.
  - QSL confirmations
  - Label generation

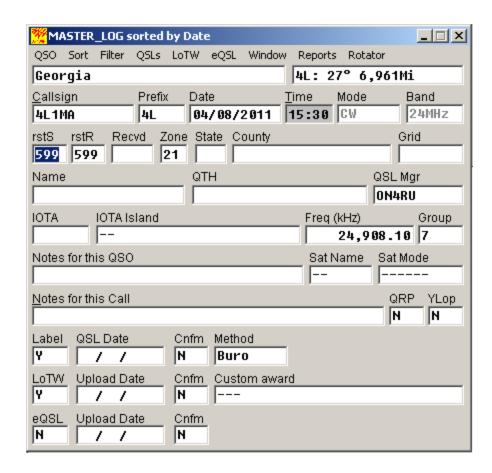




## **QSO Entry Window**



- Information generated by packet spot:
  - Callsign (can be entered manually)
  - Once call is entered other info generated by internal database:
    - Country, heading/distance, prefix, QSL manager, IOTA number and name.
- Information generated by radio:
  - Mode, Band, Frequency
- Information generated by call sign data base:
  - Name, QTH
- Notes for QSO and Call entered by operator.
- Label, LoTW and eQSL defaults set in preferences.
- See user manual at <u>www.dx4win.com</u> for more information.

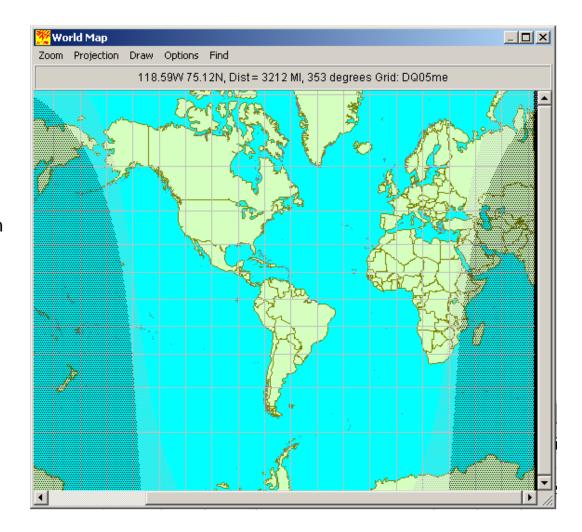




# **Grayline Map**



- A key tool for working DX
  - Map updated continuously.
  - Zoom in or out as desired.
  - Choice of standard map projections
  - Choice of amount of geographic detail shown.
  - Propagation paths based on spots.





# **K5NOF Master Log**



Column headings selected from menu. User determines sequence and arrangement.

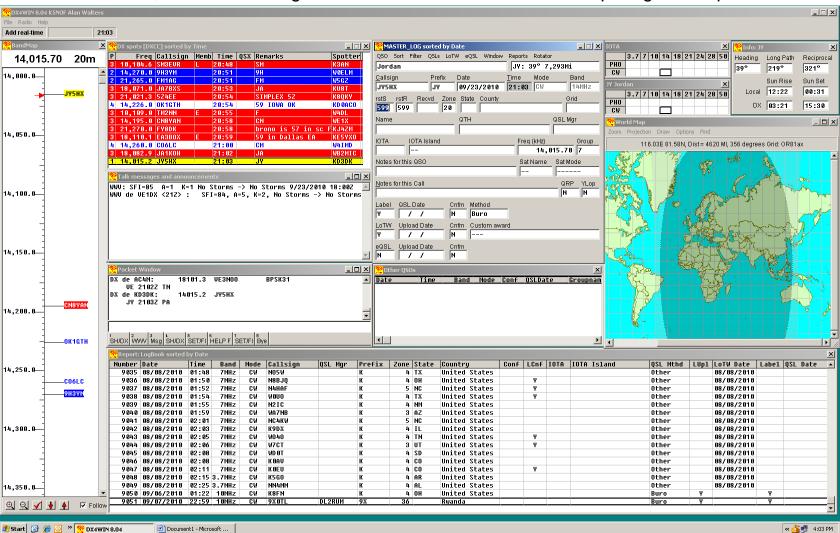
												•					
Keport: LogBook sorted by Date   Number   Date     Time   Band   Frequency   Mode   Callsign   Prefix   State   Country														×			
Number	Date	Time	Band	Frequency	Mode	Callsign	Prefix	State	Country	IOTA	DXCCmix	DXCCmod	DXCCbnd	QSL Mgr	QSL Mthd	LUp1 LoTW Date	LCnf A
11126	02/15/20	14 14:30	28MHz	28,047.61	CM	EF8USA	EA8		Canary Islands	AF 004				W2GR	Other	02/16/2014	
11127	02/15/20	14 14:31	28MHz	28,051.15	CW	OM7M	OM		Slovak Republic					OM3PA	Other	02/16/2014	
11128	02/15/20	14 14:32	28MHz	28,051.60	CW	ED7X	EA		Spain			*	*	EA7AJR	Other	02/16/2014	Y
11129	02/15/20	14 14:33	28MHz	28,052.30	CM	I OUZF	I		Italy						Other	02/16/2014	,
11130	02/15/20	14 14:35	28MHz	28,001.20	CW	OH2XX	OH		Finland			*	*		Other	02/16/2014	Y
11131	02/15/20	14 14:36	28MHz	28,008.60	CW	UV5U	UT		Ukraine					UX1UA	Other	02/16/2014	
11132	02/15/20	14 14:39	28MHz	28,041.30	CM	E7DX	E7		Bosnia-Herzegovina			*	*	E77E	Other	02/16/2014	Y
	02/15/20			28,059.00	CW	4062	40		Montenegro						Other	02/16/2014	
11134	02/15/20	14 14:45	28MHz	28,033.40	CW	S54W	\$5		Slovenia						Other	02/16/2014	
11135	02/15/20	14 15:36	28MHz	28,066.44	CW	Z39A	Z3		Macedonia						Other	02/16/2014	,
11136	02/15/20	14 15:39	28MHz	28,013.07	CM	0Z8SW	02		Denmark	EU029		*	*		Other	02/16/2014	Y
11137	02/15/20	14 17:21	28MHz	28,050.09	CW	ER1Y	ER		Moldova						Other	02/16/2014	
11138	02/15/20	14 17:26	28MHz	28,112.50	CW	YL3FT	YL		Latvia						Other	02/16/2014	,
11139	02/15/20	14 17:43	21MHz	21,012.10	CM	SUGDJO	SU9		Crete	EU015		*	*		Other	02/16/2014	Y
11140	02/15/20	14 22:41	21MHz	21,050.40	CW	9L1A	9L		Sierra Leone					98288	Other	02/16/2014	
11141	02/15/20	14 23:02	14MHz	14,044.50	CW	EL1R	EL		Liberia						Other	02/16/2014	
11142	02/15/20	14 23:12	14MHz	14,039.10	CM	HK1NA	HK		Colombia					K6 I PM	Other	02/16/2014	
11143	02/16/20	14 01:49	3.7MHz	3,530.91	CW	EA6F0	EA6		Balearic Islands	EU004		*	*		Other	02/16/2014	Y
11144	02/16/20	14 11:41	7MHz	7,013.44	CW	KH7LC	KH6	HI	Hawaii	00019					Other	02/16/2014	
11145	02/16/20	14 11:44	7MHz	7,007.56	CW	JE7JDL	JA		Japan	AS 007					Other	02/16/2014	Y
11146	02/16/20	14 13:01	7MHz	7,012.70	CW	YJ00U	٧J		Vanuatu	OC 035		*	*	N70U	Other	02/16/2014	Y
11147	02/16/20	14 13:06	3.7MHz	3,511.40	CW	KH2/N2NL	KH2		Guam	0C 026		*	*	W2YC	Other	02/16/2014	Y
11148	02/16/20	14 13:16	28MHz	28,011.40	CW	SU1DPI	SU		Greece			*	*		Other	02/16/2014	Y
11149	02/16/20	14 13:18	28MHz	28,051.00	CW	102X	I		Italy						Other	02/16/2014	,
11150	02/16/20	14 13:29	21MHz	21,110.10	CW	UN3M	UN		Kazakhstan					EA7FTR	Other	02/16/2014	
11151	02/16/20	14 13:31	21MHz	21,030.20	CW	ER1Y	ER		Moldova						Other	02/16/2014	
11152	02/16/20	14 13:31	21MHz	21,102.30	CW	Z36W	Z3		Macedonia					Z37M	Other	02/16/2014	
	02/16/20			28,085.10	CW	9K2/SP4R	9К		Kuwait					SP7DQR	Other	02/16/2014	
11154	02/16/20	14 13:48	28MHz	28,103.20	CW	D44CF	D4		Cape Verde	AF 005				SMOJHF	Other	02/16/2014	
11155	02/16/20	14 14:35	21MHz	21,107.90	CW	7Z1SJ	HZ		Saudi Arabia					EA7FTR	Other	02/16/2014	
11156	02/16/20	14 14:52	28MHz	28,075.60	CW	UA2F	UA2		Kaliningrad					DK4UW	Other	02/16/2014	
	02/16/20			21,102.85	CW	GU4CHY	GU		Guernsey	EU114					Other	02/16/2014	
	02/16/20			28,013.70	CW	OT2A	ON		Belgium					ON4HIL	Other	02/16/2014	
	02/16/20			24,940.00	SSB	J8/K8EAB	J8		St. Vincent	NA109		*	*		Other	02/16/2014	
	02/16/20			24,933.00	SSB	ON8KW	ON		Belgium			*	*		Other	02/16/2014	
	02/16/20			24,942.20	SSB	DL4KAO	DL		Federal Republic of Germany						Other	02/16/2014	
	02/16/20			24,947.80	SSB	IK6SNR	I		Italy						Other	02/16/2014	
	02/16/20			24,965.50	SSB	F5LIW	F		France			*	*		Other	02/16/2014	
	02/16/20			28,028.80	CW	6W/G3TXF	6W		Senegal			*	*	OQRS	Other	02/16/2014	
	02/16/20			28,066.20	CW	YN2NC	YN		Nicaragua			*	*	AI 4U	Other	02/16/2014	
	03/06/20			21,007.50	CW	RI1ANC	CE9		Antarctica	AN016		*	*	RN10N	Other	03/22/2014	
	03/11/20			10,103.10	CW.	KH600	KH6	HI	Hawaii	00019		*	*		Other	03/22/2014	
	03/14/20			3,529.00	CW	W1AW/7	К	AZ	United States of America	300.7					Other	03/22/2014	
	03/14/20			10,111.00	CW	W1AW/7	K	AZ	United States of America						Other	03/22/2014	
	03/14/20			10,115.88	CW	W1AW/8	K	OH	United States of America						Other	03/22/2014	
	03/21/20			24,907.40	CW	W1AW/KH2	KH2		Guam	00026					Other	03/22/2014	
	03/21/20			24,895.00	CW	TX6G	FO/A		Austral Islands	0C114		*	*	G3TXF	Other	03/22/2014	
	03/22/20			7,005.70	CW	ZL7AAA	ZL7		Chatham Islands	00038			-	UE7NY	Other	03/22/2014	
	03/28/20			24,935.00	SSB	KL7SB	KL7	AK	Alaska	30 900				NISDX	Other	Υ 93/22/2014	
	03/28/20			24,896.00	CW	W1AW/0	K	IA	United States of America	+					Other	Y	
	03/28/20			28,397.00	SSB	ZL7AAA	ZL7	10	Chatham Islands	00038				UE7NY	Other	Y	
	03/28/20			7,012.30	CW	HH2/N5JR	HH		Haiti	NA 896				VL [ ] ]	Other	Y	
	03/28/20			18,070.00	CW	HK0/UA4WHX	HKØ		San Andres & Providencia	NA 033				-	Other	Ϋ́	
	04/02/20			24,938.00	SSB	HC8ART	HC8		Galapagos Islands	SA004				-	Other	Y	-
	0-1/ 02/20	17 20.07	2411112	24,700.00	330	HOOMN I	1100		aarabadas tstanas	30004					other	•	> .
																	2 ,;



#### DX4Win



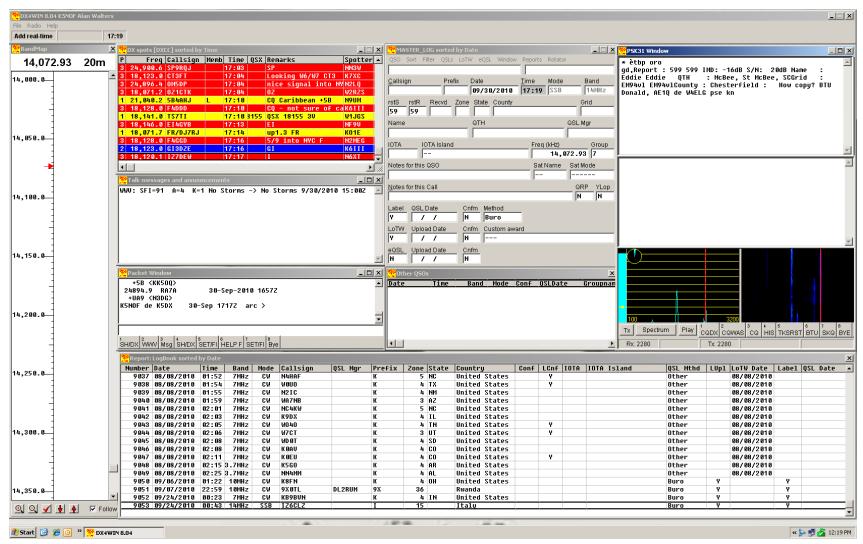
User selects, sizes and arranges windows as desired. K5NOF setup for general operation.





# DX4Win PSK 31 Interface







#### DX4Win with MMTTY



