

WD2XSH status report: December 1, 2012 - February 28, 2013**Prepared by Fritz Raab, W1FR, Experiment Coordinator****May 6, 2013****1. SUMMARY OF OPERATIONS**

This report provides a summary of WD2XSH activity during the Winter 2012-2013. The key statistics of our operations during this period are:

- Number of QSOs: 1 additional, total 504;
- Number of reports via web site: 455 additional, total 15,964;
- Operating hours: 4,833 additional, total 143,787; and
- Number of interference complaints: 0.

All statistics are based upon the end of the reporting period (02/28/13). Only transmitting hours are included.

2. ADMINISTRATIVE

Ralph Wallio, WØRPK, has compiled statistical data on this experiment for a number of years. He is relocating and has therefore resigned. Rudy Severns, N6LF, has agreed to take over tallying the operating hours and QSOs.

We are sorry to report that one of our operators, Fred Temple, KN8AZN - WD2XSH/29 passed away on April 16. In addition to operating, he developed the solid-state linear amplifier for 600 meters that was used in the transportable station, and he also operated a grabber that allowed many of us to see our signals as received at his QTH in Ohio.

3. COMMUNICATIONS

There was increased activity during the winter, as expected. The locations of currently licensed 600-m and 630-m stations are shown in Figure 1.

DK4FC has been received in Tennessee by KU4XR (Figure 2), a distance of 4511 mi. He was transmitting QRSS-10.

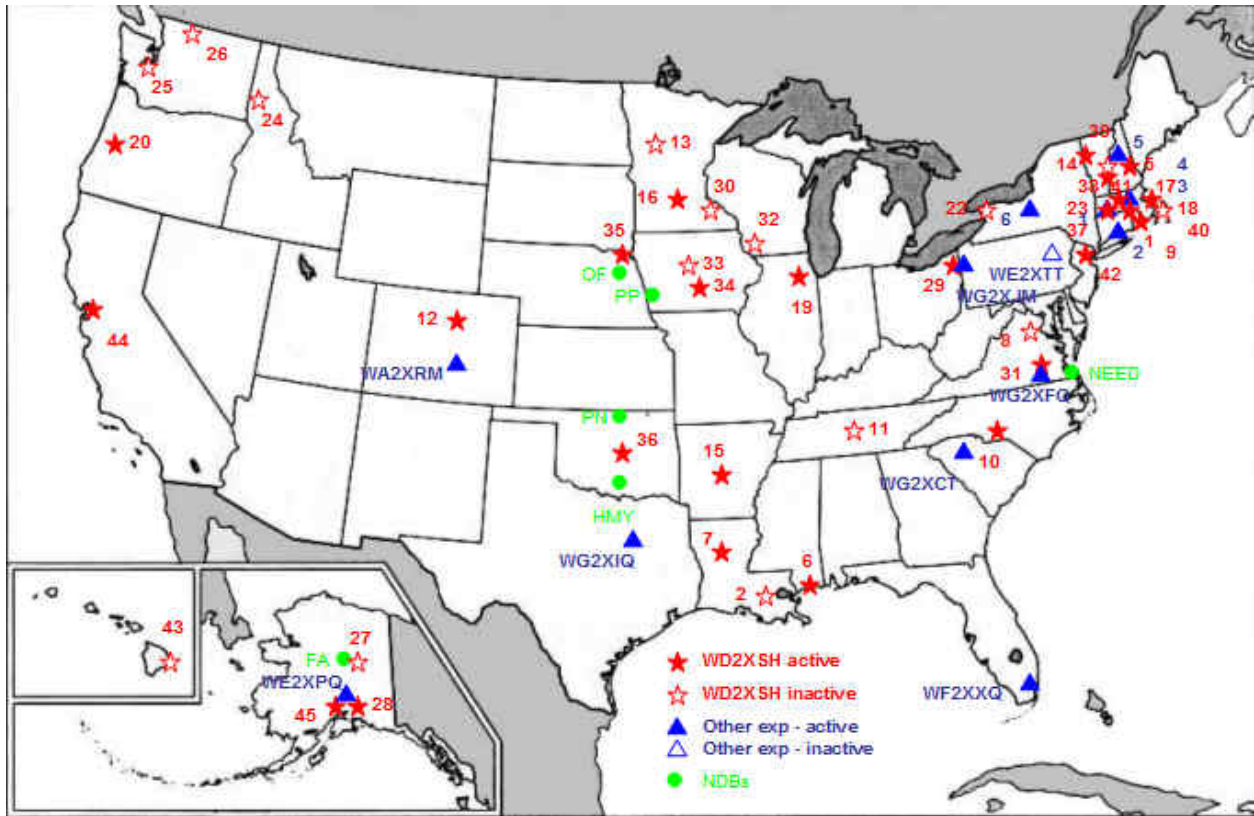


Figure 1. Locations and status of US 500-kHz experimental stations.

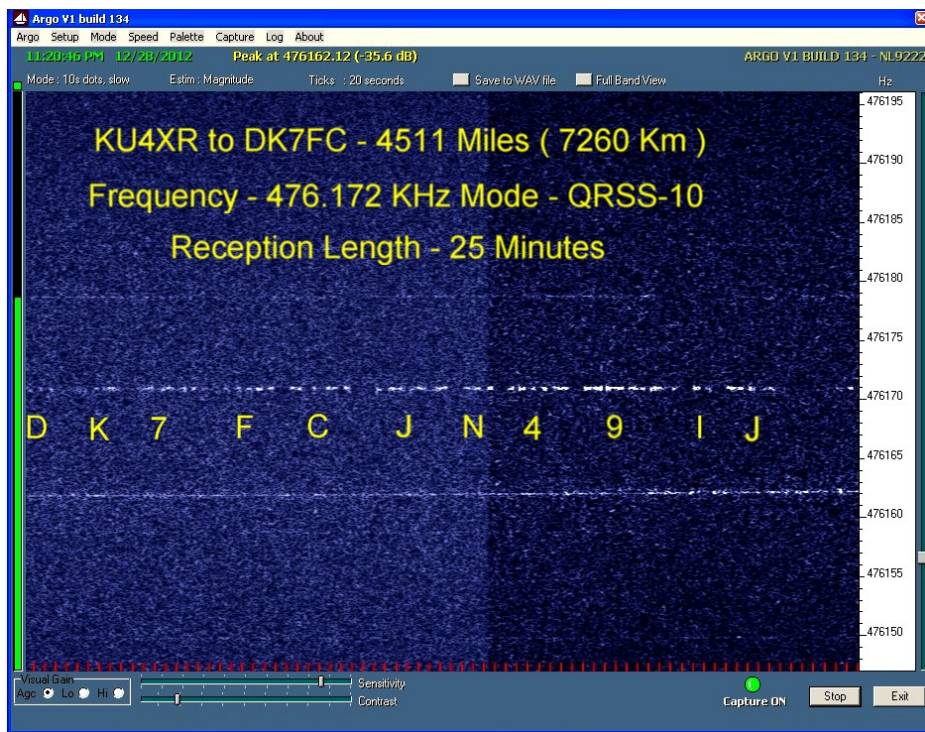


Figure 2. Reception of DK7FC by KU4XR.

4. ACTIVITIES

Nothing to report.

5. INTERFERENCE

There have been no reports of interference, however, we are continuing to monitor three potential interference problems:

- NDB OF continues to operate on 510 kHz.
- We continue to hear NEED on 505 kHz from time to time.
- NDB FA continues to operate on 510 kHz.

Additional reports and DF bearings place the pirate in SE Ohio, SW Pennsylvania, or northern West Virginia. I asked all of the 500-kHz operators to ignore him. He has not been heard again since shortly after New Year's Day.

6. OTHER US EXPERIMENTAL LICENSES

The frequency bands of US and foreign amateur and experimental licenses are shown in Figure 2. Some of the foreign allocations have been terminated as national regulators approve amateur operation in the 630-meter band. The parameters of U.S. experimental licenses are given in Appendix B, and the known unlicensed (part-15) operators are given in Appendix E.

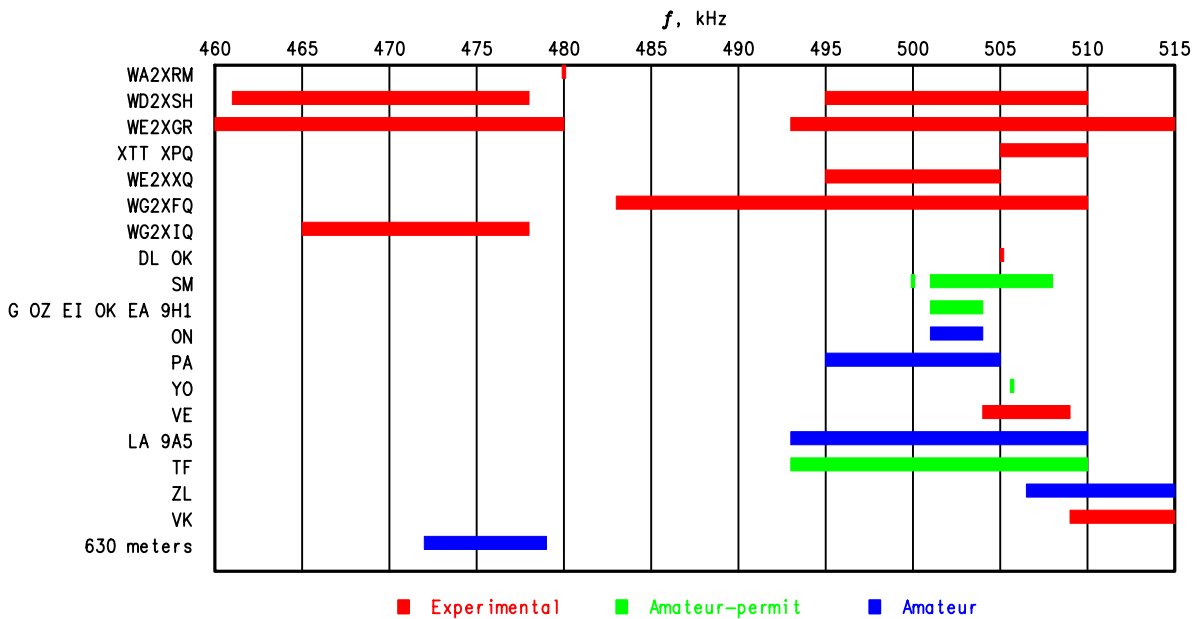


Figure 4. Worldwide amateur activity near 500 kHz.

On Jan. 7, a modification to the WG2XCT license was approved. It allows operation from 465 to 495 and 505 to 510 kHz with an ERP of 500 W. It appears that the FCC is indeed excluding new licenses from the former distress band.

On February 27, Brian Pease W1IR, applied for an experimental license. He has been assigned the callsign WG2XPJ. He requests 1 W ERP on 472 - 479 kHz with an assortment of narrowband modes such as PSK31 and JT9-1. His stated objective is to try horizontal dipoles close to the ground as a way of generating signals. He is located in Milton, Vermont.

7. INTERNATIONAL AMATEUR ACTIVITIES

A number of regulators have approved amateur use of the 630-meter band.

The Irish regulator Comreg approved use of the 630-meter band in late December. Switzerland granted access on January 1 with 5 W ERP. New Zealand amateurs were granted permission to use 472 - 479 kHz with 25 W EIRP effective Dec. 20. They will lose access to 505 - 510 kHz at the end of 2013.

Amateurs in the following countries now have permission to use the 630-meter band:

Germany, Greece, Malta, Monaco, Norway, Phillipines, Czech Republic, Ireland, Switzerland, New Zealand.

8. HERITAGE (MUSEUM) OPERATIONS

Appendix D identifies the known heritage stations in the USA. WNE has been on the air on 472 kHz.

9. REGULATORY

The FCC is currently dealing with comments on a possible 137-kHz amateur band. No action has been taken on the ARRL petition for the 630-meter band.

10. MISCELLANEOUS

Juma has adapted their TX500 transceiver so that it is operable from 450 to 550 kHz. It employs a high-efficiency power amplifier and can produce up to 60 W of constant-envelope signal. It includes a receiving preamplifier and up-converter.

11. PLANS

Several WD2XSH stations will be continuing operations through the summer.

APPENDIX A. WD2XSH STATISTICS

STATION	CALL	STATUS	11/30/12		02/28/13		LAST LOG
			HOURS	QSOs	HOURS	QSOs	
WD2XSH/1	W1NZR	Inactive	4	3	4	3	04/12
WD2XSH/2	W5TVW	Inactive	13	22	13	22	08/07
WD2XSH/5	KW1I	ON	73	57	83	57	02/13
WD2XSH/6	W5THT	ON	10650	180	10969	185	02/13
WD2XSH/7	W5JGV	ON	20737	1	22322	1	02/13
WD2XSH/8	N4ICK	Inactive	0	0	0	0	-
WD2XSH/9	W2ILA	Inactive	10	27	10	24	05/10
WD2XSH/10	W4DEX	ON	2303	30	2366	30	02/13
WD2XSH/11	WS4S	Inactive	810	12	810	12	11/10
WD2XSH/12	AI8Z	ON	31759	26	31892	26	02/13
WD2XSH/13	K0J0	SK	997	7	997	7	08/08
WD2XSH/14	W1FR	ON	541	10	605	11	02/13
WD2XSH/15	W50R	OFF	14140	2	14140	2	02/13
WD2XSH/16	WE0H	Inactive	1186	16	1356	16	02/13
WD2XSH/17	AA1A	Inactive	11802	23	11802	31	03/12
WD2XSH/18	N1EA	Inactive	3959	0	3959	0	04/08
WD2XSH/19	K9EUI	ON	1361	3	1367	3	01/13
WD2XSH/20	N6LF	Moved	2402	7	2402	7	03/12
WD2XSH/21	W0RW	Dropped	652	0	652	0	02/11
WD2XSH/22	WB2FCN	Inactive	-	-	-	-	-
WD2XSH/23	K2ORS	Inactive	112	1	112	1	08/09
WD2XSH/28	KL7Q	ON	63	6	63	6	02/13
WD2XSH/29	KN8AZN	ON	499	5	499	5	01/13
WD2XSH/31	WA1ZMS	ON	22822	8	24822	8	02/13
WD2XSH/34	W0RPK	Moved	153	1	153	1	04/11
WD2XSH/35	K0HW	Inactive	11	0	11	1	11/12
WD2XSH/36	W5GHZ	Inactive	1180	0	1180	0	08/10
WD2XSH/37	W1XP	ON	6521	16	6888	16	02/13
WD2XSH/38	KN1H	ON	2157	2	2322	2	02/13
WD2XSH/41	W1HK	Inactive	18	13	18	13	04/12
WD2XSH/42	K2LRE	ON	105	0	116	0	02/13
WD2XSH/44	AC6QV	QRT (Moved)	72	0	72	0	08/12
WD2XSH/45	KL7UW	ON	175	6	175	6	02/13

WD2XSH/46	N03M	Now	WG2XJM	1612	5	1612	5	10/12
TOTAL	02/29/12	13	ON	121,743	490			
TOTAL	05/31/12	18	ON	129,081	492			
TOTAL	08/31/12	18	ON	134,811	492			
TOTAL	11/30/12	10	ON	138,954	503			
TOTAL	02/28/13	10	ON	143,787	504			

Notes:

Operating hours and QSOs are derived from logs through February 28, 2013. The statistics in this appendix were compiled by Ralph Wallio WORPK using the Excel logs submitted by the stations. Decreases in the number of operating hours or QSOs from the previous total indicate correction of errors. Several stations are off the air because of health or equipment problems. "ON" means operation within the past year. Stations who do not submit logs each month are subject to an automatic QRT order and must remain off the air until their log has been brought up to date.

APPENDIX B. US EXPERIMENTAL LICENSES

CALL	NUMBER	QTH	f, kHz	ERP, W	DATES	NOTES
WA2XRM	1	CO	480	100	01/01/09 - 01/01/14	
WD2XSH	43	USA	495 - 510 461 - 478	20	09/13/06 - 08/01/15	
WE2XGR	8	New England	493 - 515 460 - 480	1000	09/05/07 - 04/15/15	
WE2XFX	1	OK	505 - 510	20	07/27/07 - 07/26/12	Exp.
WE2XTT	1	PA	505 - 510	1500*	09/08/08 - 09/01/13	
WE2XPQ	1	AK	505 - 510	50	06/05/08 - 06/01/13	
WE2XVY	1	AZ	500 - 510	200	12/09/08 - 12/01/10	SK
WF2XAU	1	FL	505 - 510	10	06/23/09 - 01/01/10	Exp.
WF2XXQ	1	FL	495 - 505	500	10/14/11 - 10/01/16	
WG2XCT	1	SC	465 - 510	500	03/14/12 - 03/01/14	
WG2XFQ	1	VA	483 - 510	20	06/08/12 - 06/01/14	
WG2XIQ	1	TX	465 - 478	1	09/12/12 - 09/01/14	
WG2XJM	1	PA	460 - 480 495 - 515	100 100	10/24/12 - 11/01/14	
WG2XKA	1	VT	460 - 490	1	10/24/12 - 11/01/14	

* RF output to antenna

APPENDIX C. FOREIGN AMATEUR/EXPERIMENTAL BANDS

The following table gives the amateur/experimental authorizations that were in force at some time prior to approval for amateur operation in the 630-meter band. Some of these allocations have been or will be phased-out concurrent with approval of amateur operation.

COUNTRY	TYPE	BAND, kHz	ERP, W
Sweden	NoV	500, 501 - 508	20 CW, SSB, data
Germany	Exp	505.0 - 505.2	9
Czech Republic	Exp	501-504, 505.60	10
UK	NoV	501 - 504	10
Belgium	Amateur	501 - 504	5
Canada	Exp	504 - 509	20
Norway	Am/Herit	493 - 510	100 (RF) CW only
Romania	NoV	505.68	100 (RF)
Denmark	NoV	501 - 504	20
Ireland	NoV	501 - 504	10 CW, PSK-31
Netherlands	Amateur	495 - 505	5
Iceland	NoV	493 - 510	100 CW
New Zealand	Amateur	505 - 515	20 200 Hz
Croatia	Exp	493 - 510	
Australia	Exp	505 - 515	
Spain	NoV	501 - 504	5 100 Hz
Malta 9H1	Amateur	501 - 504	10
Italy	NoV	501	One station

The following countries have approved amateur operation in the international 630-meter band (472 - 479 kHz):

Germany, Greece, Malta, Monaco, Norway, the Phillipines, Czech Republic, New Zealand, Australia, Switzerland.

This list has been changing frequently and is no doubt incomplete.

APPENDIX D. HERITAGE STATIONS

CATEGORY	CALLSIGN	FREQUENCIES	OPERATOR / QTH
Coastal	KSM	500, 426	MRHS, Bolinas, CA
	KFS		
	KPH	500, 426	MRHS, Bolinas, CA
	KLB	500, 488	Seattle, WA
	WLO	500, 438	Mobile, AL
New	WNE	500, 472	NEHRS, Stoneham, MA

	KDR	500, 482	Bellevue, WA
	WFT	500, 486	KZ4RV, Palmeto, FL
USCG	NMC	500, 448, 472	Bolinas, CA
	NMN	500, 448, 468	Chesapeake, VA
	NOJ	500, 416, 470	Kodiak, AK
Ships	KKUI		SS American Victory
	KYVM		SS Red Oak Victory
	KECW		SS Lane Victory
	KXCH		SS Jeremiah O'Brien
	KHRC		SS Matsonia
	NWVC	500, 512	LST325, Evansville, IN
	NTTH	500, 512	USS Cassin Young, Charleston, MA
	NEPL		USS Massachusetts, Fall River, MA
	NWKJ		USS Yorktown, Charleston, SC
Foreign	LGQ	493 - 510	Rogaland, Norway
	LM500LGN	493 - 510	Bergen, Norway

APPENDIX E. US PART-15 OPERATORS

<i>f</i> , kHz	ID	QTH	OPERATOR
510.1	HI	Monroe, CT	
510.903	EH	East Haven, CT	K1RGO
515.15	U	Magdalena, NM	Mike Mideke - Inactive

APPENDIX F. CANADIAN 500-kHz STATIONS

CALL	OP	QTH	STATUS
VX9BDQ	VE7BDQ	Delta, BC (near Vancouver)	Active
VX9MRC	VO1NA	Torbay, NFLD	Active
VX9ZZZ	VE1ZZ	Nova Scotia	Active
VX90HH	VE30HH	Richmond Hill, Ontario	Inactive

APPENDIX G. COMMUNICATION RECORDS

The reception and QSO distances (in miles) below have been compiled by Ralph Walio WØRPK.

STATION	CW	QRSS	DIGIT	AUTO*	SSB	QSO
WD2XSH/1	56	--	--	--	--	56
WD2XSH/2	778	--	--	--	--	775
WD2XSH/5	1,508	1,508	--	--	--	1,315
WD2XSH/6	3,434	6,679	--	--	--	2,079
WD2XSH/7	3,212	8,903	1,951	4,866	--	266
WD2XSH/9	1,155	--	--	--	--	649
WD2XSH/10	3,767	4,369	701	5,305	--	747
WD2XSH/11	1,039	4,515	--	--	--	884
WD2XSH/12	1,811	1,811	1,306	2,357	--	1,696
WD2XSH/14	1,467	1,467	--	--	--	747
WD2XSH/15	930	1,432	--	1,420	--	377
WD2XSH/16	1,535	854	1,074	718	--	1,089
WD2XSH/17	3,668	4,032	--	4,611	--	1,308
WD2XSH/18	3	--	--	--	--	--
WD2XSH/19	1,814	465	392	--	--	782
WD2XSH/20	4,737	--	--	--	--	2,301
WD2XSH/23	1,185	--	--	--	--	690
WD2XSH/28	91	--	--	--	--	91
WD2XSH/29	687	1,048	669	1,090	--	669
WD2XSH/31	2,057	3,348	--	--	--	751
WD2XSH/34	1,060	--	669	273	--	669
WD2XSH/35	1,321	--	--	--	--	1,209
WD2XSH/36	--	--	--	--	--	--
WD2XSH/37	1,098	--	--	3,489	--	467
WD2XSH/38	1,468	1,468	--	524	--	238
WD2XSH/41	14	--	--	--	--	14
WD2XSH/42	731	--	--	--	--	357
WD2XSH/44	1,448	--	--	--	--	--
WD2XSH/45	96	--	--	2,893	--	91
WD2XSH/46	1,396	--	26	3,697	--	1,116
WE2XGR/1	2,293	2,488	473	--	1,286	975
WE2XGR/2	3,771	4,137	1,407	4,735	1,209	3,379
WE2XGR/3	1,094	3,700	1,476	4,650	671	670
WE2XGR/5	174	527	--	--	--	174
WE2XGR/6	4,253	1,205	--	4,872	3,139	3,713
WE2XGR/8	238	--	--	--	--	238
WA2XRM	623	2,441	--	--	--	--
WE2XPQ	96	3,083	--	--	--	--
WF2XXQ	--	--	--	1,750	--	--
WF9XIH	--	--	--	--	922/	--
WG2XCT	--	790	--	672	--	--
WG2XFQ	--	--	--	--	557/	--
WG2XIQ	1,116	--	--	1,991	--	1,116

WG2XJM	1,116	--	--	4,039	465	1,116
WG2XKA	373	--	--	2,946	--	--
VX9BDQ	2,695	2,461	--	2,112	--	--
VX9MRC	2,532	3,106	--	1,071	--	2,532
VX9ZZZ	2,505	--	--	--	--	2,505

*NOTE: AUTO includes PC-based beacon modes WSPR/WOLF/OPERA/ROS/JT65, etc., which are not being used for QSOs.