

WD2XSH status report: December 1 - February 28 , 2009**Prepared by Fritz Raab, W1FR, Experiment Coordinator****March 21, 2010****1. SUMMARY OF OPERATIONS**

This report provides a summary of WD2XSH activity during the spring of 2009. The key statistics of our operations to date are:

- Number of QSOs: 36 additional, total 404;
- Number of reports via web site: 1144 additional, total 10,723;
- Operating hours: 8,017 additional, total 49,286; and
- Number of interference complaints: 0.

All statistics are based upon the end of the reporting period (02/28/10).

2. ADMINISTRATIVE

There are no administrative issues to report.

3. COMMUNICATIONS

Conditions during the winter were generally good. Nine of our "new" stations are now on the air. As a result, there has been a great deal of activity during the past three months. The general locations and status of WD2XSH and other stations are shown in Figure 1. Appendix A gives the status of each station. Appendix G gives the reception and QSO distances for each station.

Several stations participated in straight-key night (SKN) on January 1. The participating stations included WD2XSH /16, /17, and /37 and WE2XGR/2, /3, and /6.

On February 1, stations /31 and /42 made a QSO. Both were using the vintage equipment featured in the previous newsletter. On February 20, /31 and /5 made another QSO using vintage equipment.

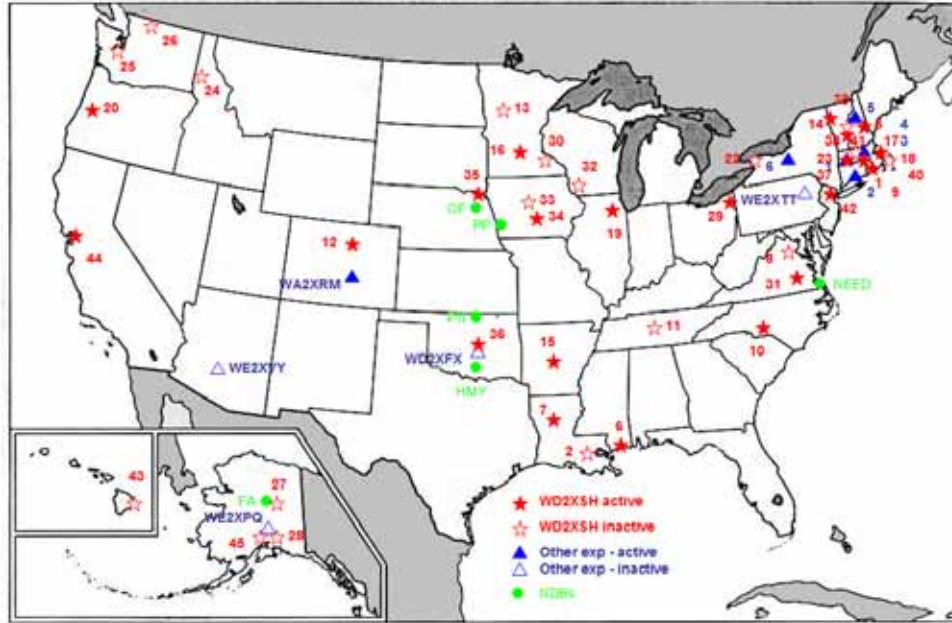


Figure 1. Locations and status of US 500-kHz experimental stations.

4. INTERFERENCE

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

NDB OF

NDB OF continues to operate on 510 kHz.

NEED

We continue to hear NEED on 505 kHz from time to time.

510 kHz in Bay Area

An unmodulated carrier at 510 kHz has been reported in the San Francisco area. This may be the result of cross-modulation of two local AM stations.

5. OTHER US EXPERIMENTAL LICENSES

The frequency bands of US and foreign amateur and experimental licenses are shown in Figure 2. The parameters of U.S. experimental licenses are given in Appendix B, and the known unlicensed (part-15) operators are given in Appendix E.

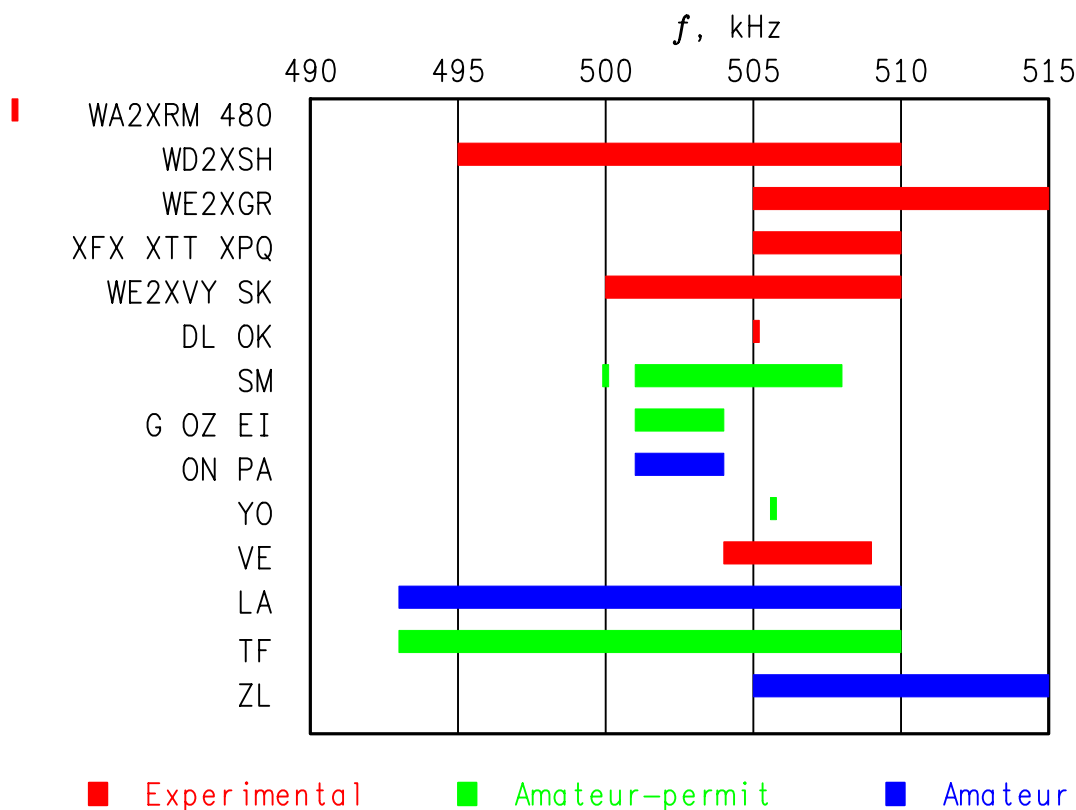


Figure 2. Worldwide amateur activity at 500 kHz.

AB4OM's experimental license WX2FAU expired on January 1. His objective was antenna testing and he has no further funding.

WE2XPQ (KL1X) in Alaska has been testing with 10 to 200 W. However, he is now deployed to Oklahoma for an extended period and WE2XPQ will not be on the air until he returns.

W0RW reports that his WA2XRM beacon on 480 kHz has been in operation since 2000 and has operated for a total of about 56,000 hours. There have been no interference complaints so far.

6. INTERNATIONAL AMATEUR ACTIVITIES

The frequencies available to amateurs in other countries are shown in Figure 2 and Appendix C. Appendix F gives known Canadian experimental licenses.

Some Dutch amateurs began transmitting on 500 kHz on Jan. 1.

Cuban amateurs (via CO2KK) are said to be working on an application for access to 500 kHz.

Following his tradition, the pirate station "PAT" again sent "HPY XMAS PAT" on Christmas day and "HYN PAT" on New Year's Day of 499.3 kHz. "PAT" is believed to be located in the Irish Republic. A "XMAS TEST" transmission on 505.3 kHz was also heard in Europe. It is thought to originate in Scandinavia.

On November 5, Iceland's Post and Telekom granted access to 600 meters for Iceland's amateurs. They are allowed 100 W ERP and CW only from 493 to 510 kHz. Access is by permit similar to the NoV system in the UK.

On March 1, New Zealand's radio amateurs were given permission to operate on 600 meters. They are allowed to use 505 to 515 kHz with a maximum EIRP of 25 W and a maximum bandwidth of 200 Hz. This is open to any licensed amateur; no special permission is needed. On March 4, ZL1BPU made the first transmission, which was received by ZL2CA.

This means we now have amateur/experimental stations operating in all three ITU regions and on frequencies from 493 to 515 kHz.

7. HERITAGE (MUSEUM) OPERATIONS

Appendix D identifies the known heritage stations in the USA.

WNE (New England Historical Radio Society) has acquired a BC-250GY transmitter that is capable of producing 450 W CW.

8. REGULATORY AND WRC-12

The author has been unable to hear the HA DGPS station on 454 kHz (Hawks Run, PA) during the winter.

9. PORTABLE STATION

W0RPK's portable station is operational. Preliminary tests suggest that ground-wave communication is reliable to 100 or 200 mi. However, he has not been able to find volunteers to monitor for ground-wave signals on a regular basis.

10. EQUIPMENT

N3ZI has introduced a new version of his DDS that includes the resolution for 500 kHz. The special version previously implemented for 500-kHz is being discontinued.

The Juma transmitter is now available and appears to work fine.

11. PLANS

We are planning to do more ground-wave tests this summer. These tests will involve the midwest stations and several other clusters who produced useful results in the 2008 tests. A number of the new stations are continuing to ready their stations.

APPENDIX A. WD2XSH STATISTICS

STATION	CALL	STATUS	08/31/09		11/30/09		LAST LOG
			HOURS	QSOs	HOURS	QSOs	
WD2XSH/1	W1NZR	Inactive	13:36	7	13:36	7	08/09
WD2XSH/2	W5TVW	Inactive	12:31	22	12:31	22	07/07
WD2XSH/5	KW1I	Inactive	24:07	48	24:07	48	02/09
WD2XSH/6	W5THT	ON	5831:00	134	6390:23	154	02/10
WD2XSH/7	W5JGV	ON	49:50	0	1170:37	0	02/10
WD2XSH/8	N4ICK	Inactive	0	0	0	0	-
WD2XSH/9	W2ILA	Inactive	9:37	26	9:37	26	02/09
WD2XSH/10	W4DEX	ON	1280:15	24	1731:26	26	02/10
WD2XSH/11	WS4S	Inactive	809:42	12	809:42	12	08/08
WD2XSH/12	AI8Z	ON	15865:52	23	17386:35	24	02/10
WD2XSH/13	KOJO	SK	997:00	7	997:00	7	08/08
WD2XSH/14	W1FR	ON	253:43	7	313:55	8	02/10
WD2XSH/15	W5OR	ON	4131:33	2	4134:52	2	02/10
WD2XSH/16	WE0H	ON	963:46	11	1064:34	14	02/10
WD2XSH/17	AA1A	ON	908:01	23	2690:57	23	02/10
WD2XSH/18	N1EA	Inactive	3935:00	0	3935:00	0	04/08
WD2XSH/19	K9EUI	ON	1343:05	3	1343:05	3	02/10
WD2XSH/20	N6LF	ON	2070:21	7	2152:53	7	02/10
WD2XSH/21	WORW	Dropped	652:42	0	652:42	0	11/06
WD2XSH/22	WB2FCN	Inactive	-	-	-	-	-
WD2XSH/23	K2ORS	Inactive	110:11	0	112:11	0	08/09
WD2XSH/29	KN8AZN	ON	664:21	5	1220:17	5	02/10
WD2XSH/31	WA1ZMS	ON	53:23	1	1816:14	6	02/10

WD2XSH/34	WORPK	ON	62:16	1	148:32	1	02/10
WD2XSH/35	KOHV	ON	1:01	0	1:01	0	02/10
WD2XSH/36	W5GHZ	ON	47:21	0	245:07	0	02/10
WD2XSH/37	W1XP	ON	158:07	5	698:51	5	02/10
WD2XSH/38	KN1H	ON	-	-	168:50	0	02/10
WD2XSH/41	W1XP	?	-	-	?	?	No log
WD2XSH/42	K2LRE	ON	?	?	9:11	4	02/10
WD2XSH/44	AC6QV	ON	18:44	0	31:41	0	02/10
TOTAL 08/31/09	14 ON		37,529	336			
TOTAL 11/30/09	18 ON		41,269	368			
TOTAL 02/28/10	19 ON		49,286	404			

Note:

Operating hours and QSOs are derived from logs through February 28, 2010.

The statistics in this appendix were compiled by Rudy Severns N6LF using the Excel logs submitted by the stations.

Several stations are subject to a QRT order for not being current in submitting their logs. These stations are required to remain QRT until they have rectified the situation. Generally, these stations have an equipment problem or some other problem that keeps them from operating.

Two stations moved from the location specified on our original license. They are now authorized to operate at their new QTHs.

Some changes (such as a decrease in the number of QSOs) are the result of corrections to the logs.

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	CONUS	495 - 510	20	09/13/06 - 08/01/10	
WE2XGR	5	New England	505 - 515	200	09/05/07 - 09/01/12	
WE2XFX	1	OK	505 - 510	20	07/27/07 - 07/26/12	
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.

* RF output to antenna

APPENDIX C. FOREIGN AMATEUR/EXPERIMENTAL BANDS

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	505.60	1
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	501 - 504	5
Iceland	NoV	493 - 510	100 CW
New Zealand	Amateur	505 - 515	20 200 Hz

APPENDIX D. HERITAGE STATIONS

CATEGORY	CALLSIGN	FREQUENCIES	OPERATOR / QTH
Coastal	KSM	500, 426	MRHS, Bolinas, CA
	KFS		
	KPH	599, 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	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
Foreign	LGQ	493 - 510	Rogaland, Norway
	LM500LGN	493 - 510	Bergen, Norway

APPENDIX E. US PART-15 OPERATORS

f , kHz	ID	QTH	OPERATOR
510.1	HI	Monroe, CT	
510.903	EH	East Haven, CT	K1RGO

APPENDIX F. CANADIAN 500-kHz STATIONS

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

APPENDIX G. COMMUNICATION RECORDS

The reception and QSO distances below have been compiled by Ralph Walio WØRPK.

STATION	CW	QRSS	DIGIT	WSPR	WOLF	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	3,212	1,425	--	--	--	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	2,355	--	--	1,696
WD2XSH/14	1,467	1,467	--	--	--	--	747
WD2XSH/15	930	1,432	--	--	--	--	377
WD2XSH/16	1,535	854	1,074	--	--	--	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/29	687	1,048	669	1,090	--	--	669
WD2XSH/31	1,426	3,348	--	--	--	--	751
WD2XSH/34	1,060	--	669	191	--	--	669
WD2XSH/35	1,321	--	--	--	--	--	1,209
WD2XSH/36	--	--	--	--	--	--	--
WD2XSH/37	1,098	--	--	3,489	--	--	467

WD2XSH/38	1,468	1,284	--	--	--	--	238
WD2XSH/42	636	--	--	--	--	--	357
WD2XSH/44	--	--	--	--	--	--	--
WE2XGR/1	2,293	473	473	--	--	1,286	975
WE2XGR/2	3,771	4,137	1,407	4,735	3,747	1,209	3,379
WE2XGR/3	686	3,700	1,476	4,650	--	448	670
WE2XGR/5	174	527	--	--	--	--	174
WE2XGR/6	4,253	1,205	--	4,870	--	994	3,713
WA2XRM	623	1,798	--	--	--	--	--
WE2XPQ	--	--	--	--	--	--	--
VX9BDQ	1,745	2,410	--	--	--	--	--
VX9MRC	2,325	--	--	--	--	--	1,986
VX9ZZZ	2,505	--	--	--	--	--	2,505