

WD2XSH status report: June 1 - August 31, 2013**Prepared by Fritz Raab, W1FR, Experiment Coordinator****October 13, 2013****1. SUMMARY OF OPERATIONS**

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

- Number of QSOs: 0 additional, total 504;
- Number of reports via web site: 2 additional, total 16,010;
- Operating hours: 4,381 additional, total 153,713; and
- Number of interference complaints: 0.

All statistics are based upon the end of the reporting period (08/31/13). Only transmitting hours are included.

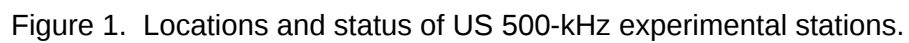
2. ADMINISTRATIVE

Nothing to report.

3. COMMUNICATIONS

Some stations remained active during summer quarter. The locations of currently licensed 600-m and 630-m stations are shown in Figure 1.

WD2XSH/14 (W1FR) in Colchester, VT and WG2XKA (WA3ETD) in Benson Vermont conducted daytime communication tests from mid May through mid July near solar noon. The distance is about 60 miles. The results are shown in Figure 2. S and N are the S-meter readings at WG2XKA. A and K are the geomagnetic indices. SFI and SN are the solar-flare index and smoothed sunspot number, respectively. The signal strength varies somewhat from day to day, but there is no correlation with the geomagnetic nor solar parameters. The propagation mode appears to be primarily ground wave and is little affected by the ionosphere. This is further confirmation that the 630-meter band can provide reliable regional communication under all conditions.



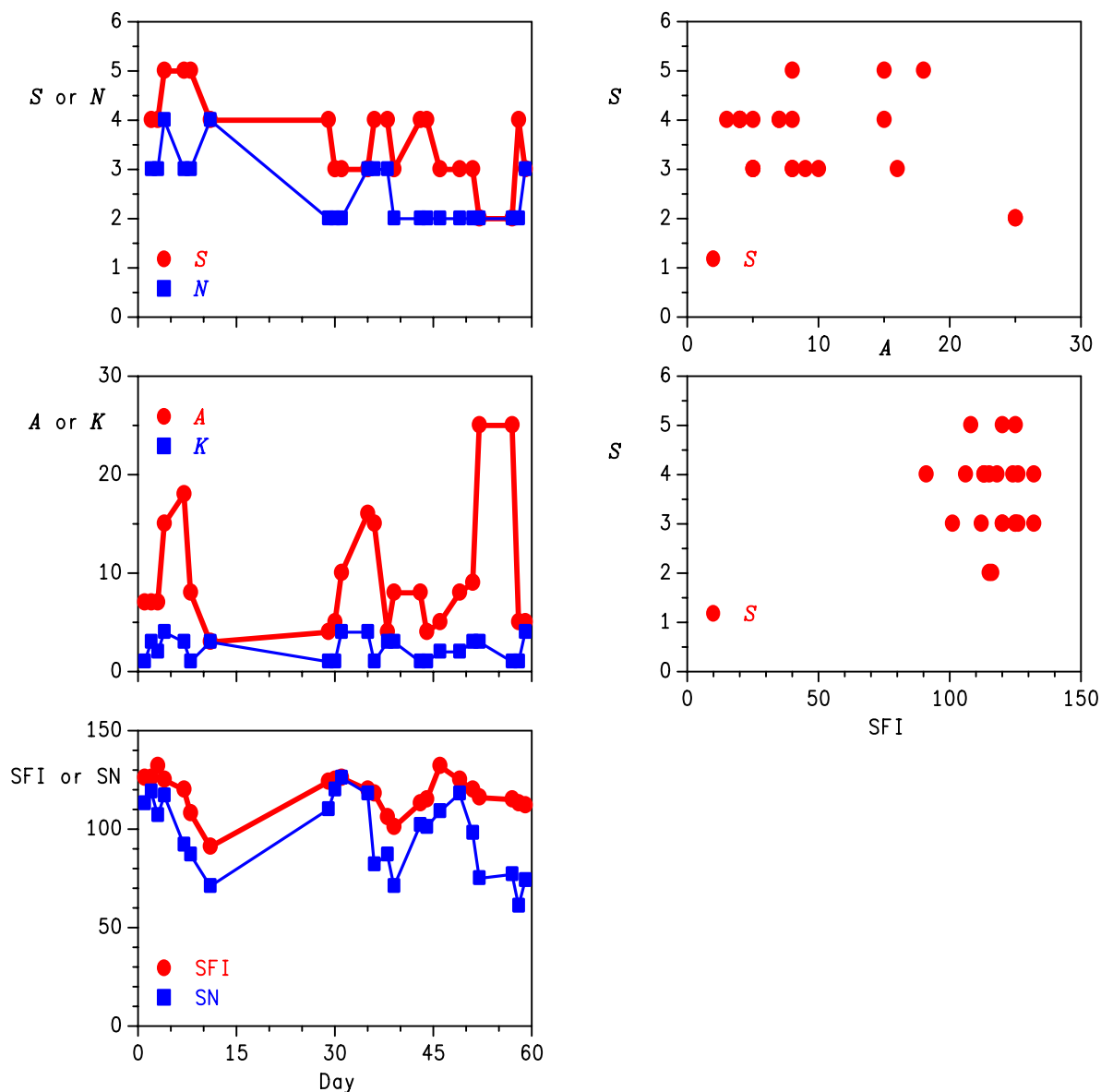


Figure 2. Results of daytime communication tests.

4. ACTIVITIES

In July, Brian Justin WA1ZMS / WD2XSH/31 received the ARRL's Doug DeMaw Award for Technical Excellence. According to the July 25 issue of the *ARRL Letter*:

Well-known microwave experimenter Brian D. Justin, WA1ZMS, of Forest, Virginia, is the winner of the ARRL Doug DeMaw, W1FB, Technical Excellence Award. The Board recognized Justin for his "distinguished lifelong Amateur Radio career," which has included expeditions that garnered Justin the first VUCC Award on 47, 76, 122, 145 and 241 GHz. Justin was further

commended for developing and building several millimeter-wave stations and for operating several repeaters, from 146 to 1200 MHz.

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.

6. OTHER US EXPERIMENTAL LICENSES

The frequency bands of US and foreign amateur and experimental licenses are shown in Figure 3. 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.

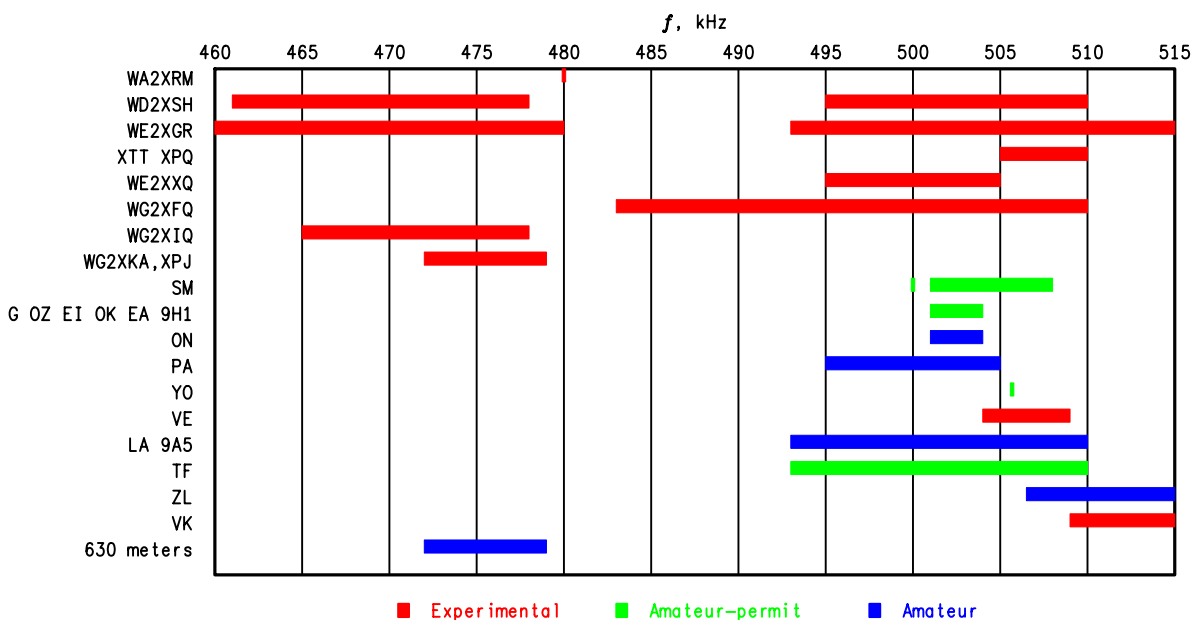


Figure 3. Worldwide amateur activity near 500 kHz.

Lawrence Stoskopf, N0UU in Salina, Kansas, has been issued experimental license WG2XUX for operation from 472 to 479 kHz, effective August 29.

WE2XGR/10 in Skowhegan, ME became active in mid September.

7. INTERNATIONAL AMATEUR ACTIVITIES

In late June, Industry Canada proposed opening the band from 472 to 479 kHz to Canadian amateurs.

CNAF has authorized Spanish amateurs to operate on 472 to 479 kHz.

Fourteen amateurs in Australia and New Zealand are reported to be on the air. One Finish station is also reported to be on the air.

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, Finland, Spain.

8. HERITAGE (MUSEUM) OPERATIONS

Appendix D identifies the known heritage stations in the USA.

The Maritime Radio Historical Society held its Night of Nights on July 12 to mark the anniversary of the last official CW transmission for maritime comms.

9. REGULATORY

Nothing new to report. The FCC has yet to act upon the NPR for 137 kHz.

10. MISCELLANEOUS

Nothing to report.

11. PLANS

Activity should pick-up as conditions improve in the fall. No specific tests are planned.

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	02/13

WD2XSH/2	W5TVW	Inactive	13	22	13	22	08/07
WD2XSH/5	KW1I	ON	83	57	89	57	08/13
WD2XSH/6	W5THT	ON	11328	187	11508	189	08/13
WD2XSH/7	W5JGV	ON	24557	1	24814	1	08/13
WD2XSH/8	N4ICK	Inactive	0	0	0	0	-
WD2XSH/9	W2ILA	Inactive	10	27	10	24	05/10
WD2XSH/10	W4DEX	ON	2390	30	2390	30	08/13
WD2XSH/11	WS4S	Inactive	810	12	810	12	11/10
WD2XSH/12	AI8Z	ON	32336	26	33925	26	08/13
WD2XSH/13	K0JO	SK	997	7	997	7	08/08
WD2XSH/14	W1FR	ON	625	11	655	11	08/13
WD2XSH/15	W5OR	OFF	14140	2	14142	2	05/13
WD2XSH/16	WE0H	Inactive	1356	16	1356	16	05/13
WD2XSH/17	AA1A	Inactive	11802	23	11802	31	03/12
WD2XSH/18	N1EA	Inactive	3959	0	3959	0	04/08
WD2XSH/19	K9EUI	ON	1406	3	1407	3	01/13
WD2XSH/20	N6LF	Moved	2402	7	2402	7	08/12
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	67	6	68	6	08/13
WD2XSH/29	KN8AZN	SK	499	5	499	5	01/13
WD2XSH/31	WA1ZMS	ON	27025	8	29323	8	08/13
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	7161	16	7161	16	08/13
WD2XSH/38	KN1H	ON	2333	2	2333	2	05/13
WD2XSH/41	W1HK	Inactive	19	13	19	13	04/13
WD2XSH/42	K2LRE	ON	116	0	150	0	08/13
WD2XSH/44	AC6QV	QRT (Moved)	72	0	72	0	08/12
WD2XSH/45	KL7UW	ON	180	6	180	6	08/13
WD2XSH/46	N03M	Now WG2XJM	1612	5	1612	5	10/12
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				
TOTAL 05/31/13	10 ON	149,332	504				
TOTAL 08/31/13	14 ON	153,713	504				

Notes:

Operating hours and QSOs are derived from logs through August 31, 2013. The statistics in this appendix were compiled by Rudy Severns 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 - 06/01/18	
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	
WG2XPJ	1	VT	472 - 479	1	05/14/13 - 05/01/15	
WG2XUX	1	KS	472 - 429	1	08/29/13 - 09/01/15	

* 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
Finland	Amateur	472 - 479	1

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, Finland, Spain.

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

f , kHz	ID	QTH	OPERATOR
510.1	HI	Monroe, CT	
510.903	EH	East Haven, CT	K1RG0
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