

## **Results: North American QSO Party – RTTY, July 2020**

**Mark Aaker, K6UFO / k6ufo@arri.net**

The July 2020 running of the NAQP RTTY had most hams staying home and able to get on the air. Other hams arranged “remote multi-ops” or practiced “social distancing” in their radio operations. On-the-air activity was high, so these adaptations were successful!

The N9TR entry was a “remote multi-op” with Ben, N9TR in Chicago, IL and Chuck, N8CL in Albany, NY to operate a station in Buffalo, NY. They used a K3 and K3/0, RemoteRigs, and connecting the N1MM+ logs via a VPN. Ben reports: “Working remotely, we missed a few things, like not realizing our 80m antenna was on the ground, until someone at the remote station let us know.”



Photo1: Ben N9TR shows off the remote setup. (Photo by N9TR)

Dxpeditions were missing due to the many travel restrictions, but the “usual” states and provinces made up for it with increased activity.

Even propagation cooperated, with nice totals on the 10 meter and 15 meter bands for many people. W7RN (operated by Jeff, WK6I) in Nevada made 100 contacts on 10 meters!

### Single Op Top Ten Breakdowns

Call	Score	QSOs	Mults	80	40	20	15	10	Team
W7RN (WK6I)	188,800	944	200	64/22	272/50	274/53	234/46	100/29	NCCC Team #1
N0XR (@N0NI)	165,300	870	190	122/39	242/44	248/45	171/37	87/25	SWACC #1
AA3B	158,424	943	168	110/26	310/47	370/49	127/33	26/13	SWACC #1
W0LSD	155,117	857	181	46/24	259/47	276/47	226/42	50/21	Grand Mesa
W4GKM	136,245	879	155	108/27	307/47	334/50	130/31	0/0	SWACC #1
K6MR	136,150	778	175	77/20	247/50	239/52	181/37	34/16	NCCC Team #1
N6WM	135,113	781	173	31/10	185/43	281/50	207/46	77/24	NCCC Team #1
K3MM	130,872	798	164	124/27	362/47	189/44	74/27	49/19	
AA5AU	130,708	797	164	98/30	235/48	273/45	164/31	27/10	SWACC #2
K9CT	129,200	760	170	127/34	246/45	286/48	84/28	17/15	SMC Ganar

Our Single-operator winner W7RN (operated by Jeff, WK6I) is a reliable competitor, and his trip to the W7RN station was a success! Second place was Dean, N0XR at the magnificent N0NI station, which usually appears in the Multi-operator category. All the calls in the Top Ten are familiar – and they provided plenty of action on the RTTY bands.

A few operators were “stuck” away from their usual contesting locations, and that change in QTH caused logging problems for operators who rely too heavily on a “pre-fill” database. In one case, more than 1 in 6 QSOs logged the wrong QTH! Please pay attention to what was sent.

Steve, KJ5T took his operation outdoors to a local park. He used a KX2 radio in the car, and a tripod to hold a vertical wire support. Good weather was reported!



Photo 2: KJ5T operates from the car. (KJ5T)



Photo 3: The KJ5T portable tower. (KJ5T)

### Single Op QRP Top Five Breakdowns

Call	Score	QSOs	Mults	80	40	20	15	10	Team
NN7SS (K6UFO)	10,944	152	72	5/3	26/10	80/35	39/22	2/2	NCCC Team #5
W8UA	6,240	120	52	0/0	61/20	48/23	9/7	2/2	
K2AL	3,828	87	44	23/11	38/16	23/14	3/3	0/0	NPARC RTTY Snitchers
KH6KG/W5	3,476	79	44	14/10	29/14	36/20	0/0	0/0	
KI9S/8	3,465	77	45	3/3	44/20	27/19	3/3	0/0	Cornwall 1

Our QRP results showed a familiar pattern of success on 80m for the East Coast, and 15m for the West Coast.

### Team Scores Top Three

1. SWACC #1 (N0XR AA3B W4GKM N4ZZ N4IQ) 659,525
2. NCCC Team #1 (W7RN K6MR N6WM N6IE KK6P) 627,160
3. SMC Ganar (K9CT WT9U AI9T K9NR N7US) 533,998

SWACC recruited a top notch team to achieve first place. The Northern California Contest Club worked with their own membership to field a very competitive Team. The Society of Midwest Contesters (SMC) staffed a top team, and seven more, all with Team names about “winning!”

### Multi-Two Breakdowns

Call	Score	QSOs	Mults	80	40	20	15	10
W5WZ	187,740	1043	180	140/33	305/52	414/51	174/37	10/7
NV9L	166,944	888	188	210/44	324/53	262/50	77/28	15/13
WV4P	166,617	891	187	172/42	362/53	275/51	74/33	8/

Our Multi-operator winner W5WZ made over 1,000 QSOs! Operators Scott, W5WZ and Bobby, WM5H kept their distance at different operator positions in the shack. They have been doing well in NAQP SSB, Field Day and IARU. Bobby predicted they could win NAQP RTTY in M/2, but it took a crash course in RTTY software, cabling, configuration, and placing jumpers around some antenna switch problems to make the prediction come true. Congratulations! Photos 4 and 5 show the W5WZ operators, Scott W5WZ and Bobby WM5H.



Photo 4: Scott W5WZ

Photo 5: Bobby WM5H

(Photos 4 and 5 by Scott's daughter Jordan, KF5GDJ)

Thank you to N6TR and WA7BNM for preparing our scores, and to Icom America for sponsoring our awards. Our next NAQP RTTY will be February 27, 2021.

**Selected Soapbox from 3830scores.com (Thank you to Bruce, WA7BNM):**

Beat last year's score substantially. Love this hobby! - AI6O  
 I did this one Field Day style in a tent on the bank of the Wisconsin River. - W9AV  
 Fought tooth and nail all day on the Online Scoreboard with NV9L. - WV4P  
 I had to run out about 10pm and search the sky for Comet Neowise, and I got a look at it ! - KI0I  
 There was a nice pipeline to the East Coast. - WQ6X  
 I like hunting for the contacts more than sitting in the same spot waiting for the bobber to go down. - NN4RB  
 First early beta test of a homebrew remote setup. Yikes! - K6OK  
 Not sure I picked the right band at the right time, fun anyway. - N3MN  
 Leaving 80m until after the 11 PM News worked well. - W1DYJ

**Team Scores**

1. SWACC #1

N0XR 165,300  
 AA3B 158,424  
 W4GKM 136,245  
 N4ZZ 128,800  
 N4IQ 70,756  
 Total 659,525

2. NCCC Team #1

W7RN 188,800  
 K6MR 136,150  
 N6WM 135,113  
 N6IE 88,914  
 KK6P 78,183  
 Total 627,160

3. SMC Ganar

K9CT 129,200  
 WT9U 122,615  
 AI9T 111,840  
 K9NR 92,416  
 N7US 77,927  
 Total 533,998

Team	Operators	Total
4. SMC Vinna	KD9MS, KG9X, AC9KW, KT9L, WB9HFK	293,124
5. Grand Mesa	W0LSD, N0TA, KI6QDH, KH6CJJ, WT0DX	271,883
6. Rappahonnock/BlueRidge/More	K7SV, N1RM, W4RN, KE4S	263,211
7. AOCC PROSPECTORS	N7GP, N7TY, W6RW, KF7U, N9NA	244,791
8. FRC Team Neowise	K2TW, W3FIZ, N2HMM, W3MF, K3PP	225,429
9. SWACC #2	AA5AU, W1UE, K7TQ	214,319
10. YCCC Masked Men	W8BAR, N1IXF, K5ZD, W1DYJ, KE1IH	202,759
11. Deep Dixie CC Team Elvis	K0WA, AB0S, KD5DD, K4AFE	188,775

12. Mid Florida Group	WA1PMA, NA4DA, N4FP, WA4IPU, N4GL	161,902
13. KCG	ND4Y, W4LC, KM4FO, WX4W, KE4KY	155,385
14. SMC Menang	N9CK, N2BJ, KW9U, N9LQ, AC8ZU	146,793
15. NCCC Team #2	W9KKN, W6EU, K6LRN, K6MM	135,846
16. MWA 1	N0AT, K0JJR, N0BUI, W0AAE, KC0NFB	133,841
17. NCCC Team #3	N6ZFO, AE6JV, K6GHA, WU6W	132,150
18. DFWCG Team Blue	NT5V, AD5XD, WB0TEV	125,955
19. SMC Kushinda	WB8BZK, ND9G, WR0H, N9SE, K9GY	122,908
20. SMC Gagner	WD9CIR, K9IG, N9DR, K9DUR, W9RE	110,742
21. PVRC Even More!	N4CW, W3DQ, K4FTO, K3SV, N4QX	106,889
22. SMC Sieg	N9TF, W9FFA, N9JF, N9TCA, N9VPV	105,137
23. SCCC #2	N6WT, KI6RRN, KF6RY, N2JNR	104,058
24. Swamp Fox Contest Group	NU4E, KG4IGC, K7OM, KS4YX	99,798
25. RTTY NORTHCENTRAL	WD0T, W0DB	99,330
26. Metro Mayhem	W9ILY, N9TK, K9PY, WA9LEY	98,967
27. TDXS	WB5TUF, KG5U, AJ4F, K5DD	95,292
28. The Borg	W7RY	86,580
29. Aardvark-1	AA2MF, N2ESP, AA0O, W4UB	86,212
30. Splinter Group	K8ARY, NI8Z, N8TCP	81,953
31. Digi Owls Team #1	AH2O, K2RB, KS2G	79,791
32. SMC Vincere	KC9K, KC9EOQ, AD9I, K9CW, W9XT	77,824
33. MWA 3	K0AD, VE3RUA, K0VG, KE0TL	76,930
34. Shenandoah Valley Wireless	W4PJW, KF4FC, AD4TJ, K4PZC	72,720
35. Digi Owls Team #2	KA2D, KC2KY	71,326
36. NCCC Team #6	KA6BIM, W6SX, K6ELE, K6DGW	69,219
37. PVRC Even Even More	NR4O, N4CF	64,652
38. Aardvark-2	W4CU, WA4EEZ, NY4I, KR4U	61,721
39. KCG-PT	KU4A, N4QS, AB4IQ, K4FN, AJ4A	61,367
40. Maskless Covid Marauders	N5RP, K5NZ, K5MXG, K5BG, K5PI	58,896
41. DFWCG Team Gold	NA5M, WB5K, KM5JV, WA5LXS, N5TIT	57,923
42. FRC Team Halley	WA3AAN, NY3B, WB2PJH	57,826
43. SCCC #1	WN6K, WQ6X, KA6WKE, KI6VC	54,410
44. PVRC Colonial Capital	K4MI, KK4R, NR4C, AI4WU	54,333
45. TCG MARKS	K4RO, AB4GG, K1GU, K3FH	51,748
46. Northeast Maryland Amateur Radio Contest Soc.	WT8WV, N3EEN, K3TEF, KE3GK	51,148
47. Bristol Thunderstorm	AA4DD	50,400
48. CanAm2020	VE3MGY, W1CTN	50,056
49. TCG SPACES	KE0L, AF4T, W4BCG	49,072
50. Milford (OH) ARC	K8PK, WS6K, AE8S, AD8DM	44,459
51. PVRC Tidewater	W4VIC, K4MIL, KH6HGP, K5VIP, KN4KL	44,194
52. NPARC RTTY Snitchers	KC2WUF, K2GLS, N2FYE, K2YG/1, K2AL	43,858
53. CGQ#1	VE2CSM, VE2EBK, VE2PI	43,347
54. Grand Mesa Part-timers	W0TM, W0ETT, N7WY	39,069
55. MWA 2	AA0AW, AC0W, W6GMT	37,765
56. NFR Accidental Diddlers	NN2NN, NS2N, W2DXE, AC2FA	36,885
57. NCCC Team #5	NN7SS, K6OK, K6ST	19,890
58. AOCC WILD BUNCH	KE6K, N1JM, K7JQ, KJ5T, AE7DW	18,270
59. SWAMP FOX SCOUTS	NI7R, WN4AFP	16,079
60. TDXS1	KC5TT, KB4KBS	13,768
61. Ssev Zmaga	WI9WI, KC9YL, WB8RFB, NG9R	13,092
62. NCCC Team #4	NA6O, WU6X, K6RIM, N6GEO	6,604

63. SM Rockets	KC9TZO, KG7VIZ	6,036
64. I-guana go to the TTY Bar	AJ9C, W9IZ, K9NW	4,312
65. Cornwall 1	KI9S/8, AB3AI	3,537
66. Drive	AJ7M	98

### Single Operator Scores

Call	Score	QSOs	Mults	QTH	Team
W8BAR (W1TO)	83,300	595	140	MA	YCCC Masked Men
N1IXF	73,021	533	137	CT	YCCC Masked Men
W1UE	42,907	401	107	MA	SWACC #2
AE1P	37,323	377	99	NH	
NG1M	34,144	388	88	RI	
K5ZD	33,810	294	115	MA	YCCC Masked Men
AE6JV	29,391	291	101	NH	NCCC Team #3
K1NZ	26,852	274	98	MA	
N1DBL	23,644	257	92	MA	
N1KM	19,436	226	86	RI	
AE1EZ	17,168	232	74	NH	
KB1GKN	14,175	175	81	NH	
KA2KON	9,152	176	52	NH	
W1DYJ	8,308	134	62	ME	YCCC Masked Men
K2YG/1	7,139	121	59	MA	NPARC RTTY Snitchers
W1CTN	5,830	106	55	CT	CanAm2020
K1SM	5,084	124	41	MA	
K1VW	4,896	96	51	ME	
NG1I	4,588	148	31	MA	
W1EQ	4,275	95	45	CT	
N1UZ	3,724	98	38	MA	
N1GB	1,612	52	31	VT	
W1UJ	432	27	16	MA	
W1ZFG	360	20	18	CT	
K2TW	73,524	557	132	NJ	FRC Team Neowise
AH2O	44,220	402	110	NY	Digi Owls Team #1
KA2D	42,126	413	102	NY	Digi Owls Team #2
N2HMM	32,689	337	97	NJ	FRC Team Neowise
KC2KY	29,200	292	100	NY	Digi Owls Team #2
K2RET	25,700	257	100	NJ	
N2NF	22,411	307	73	NJ	
K2RB	19,635	255	77	NY	Digi Owls Team #1
KS2G	15,936	249	64	NY	Digi Owls Team #1
NN2NN	13,455	195	69	NY	NFR Accidental Diddlers
WB2COY	12,921	177	73	NY	
KC2WUF	12,580	185	68	NJ	NPARC RTTY Snitchers
K2GLS	11,520	160	72	NJ	NPARC RTTY Snitchers
KE2D	10,640	152	70	NJ	
W2FDJ	10,500	140	75	NJ	
NS2N	10,430	149	70	NY	NFR Accidental Diddlers
WB2NFL	9,514	142	67	NY	
N2FYE	8,791	149	59	NJ	NPARC RTTY Snitchers
AC2IK	8,064	126	64	NY	



N2MM	7,616	136	56	NJ	
K4RUM	7,590	115	66	NY	
WA2QAU	7,540	130	58	NY	
W2DXE	7,280	130	56	NY	NFR Accidental Diddlers
AC2FA	5,720	130	44	NY	NFR Accidental Diddlers
WB2PJH	4,692	102	46	NJ	FRC Team Halley
WB2WPM	4,545	101	45	NY	
KE1IH	4,320	96	45	NY	YCCC Masked Men
*K2AL	3,828	87	44	NJ	NPARC RTTY Snitchers
ND2K	3,698	86	43	NJ	
NG2P	3,040	80	38	NY	
KC2LST	1,972	68	29	NJ	
W2VTV	902	41	22	NJ	
KA2GQQ	775	31	25	NJ	
KA2AEY	480	30	16	NY	
W2QQ	338	26	13	NY	
W2YK	260	20	13	NY	
AC2RL	96	12	8	NY	
WB2KWC	81	9	9	NY	
KD2DVV	24	6	4	NJ	
AA3B	158,424	943	168	PA	SWACC #1
K3MM	130,872	798	164	MD	
W3FIZ	70,448	592	119	PA	FRC Team Neowise
K3RWN	48,654	459	106	PA	
WT3K	39,516	356	111	MD	
W3DQ	32,860	310	106	DC	PVRC Even More!
W3MF	32,136	309	104	PA	FRC Team Neowise
WA3AAN	29,600	296	100	PA	FRC Team Halley
KB3AAY	29,003	299	97	MD	
N3XL	28,520	310	92	MD	
NY3B	23,534	287	82	PA	FRC Team Halley
W3UL	21,168	252	84	MD	
WA3ZSC	17,082	219	78	PA	
K3PP	16,632	198	84	PA	FRC Team Neowise
N3EEN	15,200	200	76	PA	Northeast Maryland Amateur Radio Contest Society
K3TEF	15,048	209	72	PA	Northeast Maryland Amateur Radio Contest Society
K3UL	14,940	166	90	PA	
N3DUE	14,596	178	82	MD	
AA3S	10,281	149	69	MD	
AB3GY	6,292	121	52	PA	
KG4USN	6,213	109	57	MD	
K3FH	5,724	106	54	PA	TCG MARKS
KE3GK	4,560	95	48	MD	Northeast Maryland Amateur Radio Contest Society
KE3ZT	4,452	106	42	PA	
N3NR	3,655	85	43	PA	
KB3LIX	3,577	73	49	PA	
K3RMB	3,567	87	41	PA	
W3FA	2,788	68	41	MD	
K3TN	1,728	48	36	MD	
N3WMC	1,711	59	29	PA	

N3RM	1,566	58	27	PA	
AB3SX	1,036	37	28	MD	
W3OFD	760	40	19	PA	
N3VOP	630	30	21	MD	
W3DQT	238	17	14	MD	
N3RUM	234	18	13	PA	
W3TNU	108	12	9	PA	
N3NZ	48	8	6	PA	
W4GKM	136,245	879	155	TN	SWACC #1
N4ZZ	128,800	805	160	TN	SWACC #1
K7SV	125,083	749	167	VA	Rappahonnock/Blue Ridge/More
W4GO	102,459	697	147	VA	
N4IQ	70,756	532	133	SC	SWACC #1
ND4Y	68,880	574	120	KY	KCG
KA4RRU	66,177	513	129	VA	
N1RM	62,848	491	128	VA	Rappahonnock/Blue Ridge/More
WA1PMA	61,425	525	117	FL	Mid Florida Group
NA4DA	59,708	506	118	FL	Mid Florida Group
N4CW	58,156	434	134	NC	PVRC Even More!
WS6X	56,548	422	134	VA	
K4ZW	56,196	446	126	VA	
AA2MF	54,500	500	109	FL	Aardvark-1
AA4DD	50,400	360	140	TN	Bristol Thunderstorm
NR4O	48,312	396	122	NC	PVRC Even Even More
NU4E	44,165	365	121	SC	Swamp Fox Contest Group
W4PK	43,290	390	111	VA	
W4CU	42,120	360	117	FL	Aardvark-2
W4RN	42,016	404	104	VA	Rappahonnock/Blue Ridge/More
NS4X	40,097	397	101	TN	
K8ARY	36,850	335	110	SC	Splinter Group
WA5POK	36,516	358	102	TN	
KE4S	33,264	297	112	VA	Rappahonnock/Blue Ridge/More
K4WW	30,076	292	103	KY	
K4WI	29,848	287	104	AL	
W4PJW	29,498	301	98	VA	Shenandoah Valley Wireless
W4LC	29,192	328	89	KY	KCG
KU4V	29,120	260	112	NC	
KE0L	28,616	292	98	TN	TCG SPACES
KG4IGC	28,413	287	99	SC	Swamp Fox Contest Group
W3DQS	27,459	243	113	NC	
K4SO	27,300	273	100	VA	
WA3LXD	27,000	250	108	FL	
K4RO	26,563	263	101	TN	TCG MARKS
K4MI	26,362	269	98	VA	PVRC Colonial Capital
W4VIC	26,200	262	100	VA	PVRC Tidewater
KF4FC	26,038	277	94	VA	Shenandoah Valley Wireless
KM4FO	25,665	295	87	KY	KCG
WA8OJR	22,161	249	89	SC	
N2ESP	20,608	224	92	FL	Aardvark-1
KG4CUY	20,475	225	91	AL	



K4AFE	19,749	227	87	TN	Deep Dixie CC Team Elvis
N6DW	19,608	228	86	VA	
K7OM	19,046	214	89	SC	Swamp Fox Contest Group
KK4R	18,860	205	92	VA	PVRC Colonial Capital
N4FP	18,746	206	91	FL	Mid Florida Group
N4UA	18,228	217	84	VA	
NN4RB	18,216	207	88	VA	
WX4W	17,928	216	83	KY	KCG
WA4IPU	17,658	218	81	FL	Mid Florida Group
KJ4M	17,202	183	94	AL	
N4CF	16,340	190	86	VA	PVRC Even Even More
KU4A	15,770	190	83	KY	KCG-PT
ND4G	15,664	176	89	FL	
AK4AO	15,631	203	77	VA	
N4QS	15,440	193	80	KY	KCG-PT
AB4IQ	15,132	194	78	KY	KCG-PT
WB4HRL	13,800	200	69	SC	
KE4KY	13,720	196	70	KY	KCG
N3CKI	13,662	198	69	NC	
NN4NT	13,321	173	77	AL	
AF4T	13,072	172	76	TN	TCG SPACES
AB4GG	12,222	194	63	TN	TCG MARKS
N4TY	11,741	199	59	KY	
KW4J	11,484	198	58	AL	
K4FTO	10,658	146	73	VA	PVRC Even More!
AD4TJ	10,650	150	71	VA	Shenandoah Valley Wireless
NI7R	10,143	147	69	SC	SWAMP FOX SCOUTS
WA4EEZ	10,080	160	63	FL	Aardvark-2
K1LTJ	9,960	166	60	FL	
AB4L (N4GU)	9,954	158	63	NC	
WF4W	9,702	147	66	GA	
K4MIL	9,648	144	67	VA	PVRC Tidewater
NR4C	9,039	131	69	VA	PVRC Colonial Capital
K4FN	8,305	151	55	KY	KCG-PT
K4BX	8,192	128	64	TN	
KS4YX	8,174	134	61	SC	Swamp Fox Contest Group
W2XYZ	7,688	124	62	FL	
AA0O	7,424	116	64	FL	Aardvark-1
W4BCG	7,384	142	52	TN	TCG SPACES
K1GU	7,239	127	57	TN	TCG MARKS
NR4M	6,844	118	58	VA	
AJ4A	6,720	120	56	KY	KCG-PT
K4PZC	6,534	121	54	VA	Shenandoah Valley Wireless
K4AL	6,490	118	55	TN	
W4TTY	6,264	108	58	VA	
KH6HGP (W7HJ)	6,216	111	56	VA	PVRC Tidewater
N8NN	6,032	104	58	FL	
WN4AFP	5,936	106	56	SC	SWAMP FOX SCOUTS
K3WA	5,885	107	55	NC	
WB4UBK	5,814	102	57	FL	
W4SJV	5,546	94	59	FL	

NY4I	5,537	113	49	FL	Aardvark-2
AI4WW	5,292	108	49	FL	
W0QQG	5,194	106	49	VA	
KN4DEB	4,884	111	44	VA	
K3SV	4,750	95	50	FL	PVRC Even More!
K2AV	4,641	119	39	NC	
W4UT	4,600	100	46	TN	
KN4SMO	4,585	131	35	SC	
N4GL	4,365	97	45	FL	Mid Florida Group
KR4U	3,984	83	48	FL	Aardvark-2
K3QH	3,956	92	43	FL	
W4UB	3,680	92	40	FL	Aardvark-1
N2JF	3,555	79	45	FL	
AA5JF	3,337	71	47	GA	
AA4LR	3,285	73	45	GA	
N8AID	2,856	84	34	VA	
N3KN	2,850	75	38	VA	
KB4KBS	2,550	85	30	GA	TDXS1
KS3K	2,541	77	33	FL	
KS4X	2,052	54	38	TN	
W4NBS	2,040	51	40	AL	
K3YDX	1,904	56	34	NC	
KA4OTB	1,792	56	32	TN	
N7GFB	1,700	50	34	NC	
K5VIP	1,650	55	30	VA	PVRC Tidewater
N4MM	1,450	50	29	VA	
KC4TNQ	1,404	52	27	TN	
*AA2MA	1,323	49	27	AL	
KO4Z	1,290	43	30	TN	
KO8V	1,170	45	26	VA	
N0SMX	1,170	45	26	FL	
KS4Q	1,008	42	24	VA	
W4GDG	936	52	18	VA	
KZ1O	875	35	25	FL	
WB4MM	782	34	23	FL	
KK9O	722	38	19	FL	
W2GFV	648	36	18	SC	
KW1K	486	27	18	FL	
KN4KL	480	24	20	VA	PVRC Tidewater
N4QX	465	31	15	VA	PVRC Even More!
K1GG	425	25	17	VA	
W8EH	240	16	15	TN	
K4CV	117	13	9	TN	
AI4WU	72	9	8	VA	PVRC Colonial Capital
K3NHT	63	9	7	VA	
K9IA	56	8	7	FL	
KJ4LPI	16	4	4	GA	
NF1T	12	4	3	FL	
K4ME	4	2	2	NC	
*KI4SP	1	1	1	AL	

AA5AU	130,708	797	164	LA	SWACC #2
NT5V	61,908	469	132	TX	DFWCG Team Blue
AD5XD	60,615	449	135	TX	DFWCG Team Blue
WB5TUF	55,566	441	126	TX	TDXS
KD5DD	45,087	339	133	MS	Deep Dixie CC Team Elvis
WB5BHS	36,576	381	96	AR	
NA5M	34,200	342	100	TX	DFWCG Team Gold
KG5U	31,024	277	112	TX	TDXS
K5RZA	26,746	311	86	TX	
K5NZ	22,113	243	91	TX	Maskless Covid Marauders
KD5ILA	19,355	245	79	AR	
KD5J	13,840	173	80	AR	
KT5MR	13,260	195	68	TX	
KC5TT	11,218	158	71	TX	TDXS1
W5LA	9,316	137	68	LA	
W5MF	9,300	155	60	TX	
N5HC	8,848	158	56	NM	
AJ4F	8,614	146	59	TX	TDXS
WB5K	8,235	135	61	TX	DFWCG Team Gold
KM5JV	8,060	130	62	TX	DFWCG Team Gold
K5CS	7,620	127	60	AR	
WA5LXS	7,380	123	60	TX	DFWCG Team Gold
K5MXG	6,783	119	57	TX	Maskless Covid Marauders
N5CHA	6,780	113	60	TX	
AD5LU	6,534	121	54	TX	
WA5MA	6,148	116	53	OK	
K5QR	4,606	94	49	TX	
*KH6KG/W5	3,476	79	44	AR	
WB0TEV	3,432	78	44	TX	DFWCG Team Blue
N5EKW	2,760	69	40	TX	
KN5S (K5WW)	2,673	81	33	TX	
N5UM	2,618	77	34	OK	
WA9AFM	2,480	80	31	OK	
AG5S	2,345	67	35	NM	
NA5J	2,310	70	33	TX	
N5KWN	2,294	74	31	TX	
N5XE	2,109	57	37	OK	
K5BG	1,652	59	28	TX	Maskless Covid Marauders
*KJ5T	1,650	55	30	TX	AOCC WILD BUNCH
WV5Y	1,540	55	28	TX	
K5PI	1,012	44	23	TX	Maskless Covid Marauders
AE5MM	861	41	21	OK	
N5DD	483	23	21	TX	
K5LY	294	21	14	TX	
N5AVF	266	19	14	TX	
K5DD	88	11	8	TX	TDXS
N5TIT	48	8	6	TX	DFWCG Team Gold
K6MR	136,150	778	175	CA	NCCC Team #1
N6WM	135,113	781	173	CA	NCCC Team #1
N6IE	88,914	609	146	CA	NCCC Team #1

KK6P (W7IV)	78,183	511	153	CA	NCCC Team #1
W9KKN	62,883	459	137	CA	NCCC Team #2
N6ZFO	60,604	436	139	CA	NCCC Team #3
ND2T (@K6MTU)	59,764	446	134	CA	
N6WT	50,370	438	115	CA	SCCC #2
KH7M (KH6ZM)	38,380	380	101	KH6	
W6EU	34,320	312	110	CA	NCCC Team #2
WN6K	33,800	338	100	CA	SCCC #1
W1RH	30,847	283	109	CA	
AJ6V	28,119	273	103	CA	
W6SX	26,728	257	104	CA	NCCC Team #6
K6GHA	26,136	264	99	CA	NCCC Team #3
KI6RRN	25,578	294	87	CA	SCCC #2
KH6CJJ	22,960	287	80	KH6	Grand Mesa
K6LRN	21,500	250	86	CA	NCCC Team #2
KF6RY (W6ZL)	19,926	243	82	CA	SCCC #2
K6TQ	19,780	215	92	CA	
KW6S	19,350	215	90	CA	
WQ6X	18,040	220	82	CA	SCCC #1
K6MM	17,143	217	79	CA	NCCC Team #2
W6RC	14,274	183	78	CA	
W0YK	13,455	207	65	CA	
KK6KMU	9,536	149	64	CA	
K6OK	8,568	136	63	CA	NCCC Team #5
WH6FAM	8,288	148	56	KH6	
W1PR	8,228	121	68	CA	
N2JNR	8,184	132	62	CA	SCCC #2
N6PGQ	7,353	129	57	CA	
K6ELE	6,160	110	56	CA	NCCC Team #6
W6IA	5,876	113	52	CA	
AG6AG	5,253	103	51	CA	
KE6SHL	3,977	97	41	CA	
W6OQI	3,740	85	44	CA	
W6JBR	2,592	72	36	CA	
KD6HOF	2,583	63	41	CA	
NN6NN (W6XK)	2,419	59	41	CA	
KA6W	2,310	66	35	CA	
NA6O (@W6SRR)	1,984	64	31	CA	NCCC Team #4
WU6X	1,932	69	28	CA	NCCC Team #4
K6RIM	1,440	48	30	CA	NCCC Team #4
KA6WKE	1,430	55	26	CA	SCCC #1
N6GEO	1,248	48	26	CA	NCCC Team #4
N6VH	1,215	45	27	CA	
K6BIR	1,200	48	25	CA	
KI6VC	1,140	38	30	CA	SCCC #1
NK6A	924	44	21	CA	
N6UTC	814	37	22	CA	
N6FC	350	25	14	CA	
WA6URY	336	21	16	CA	
KM6I	208	16	13	CA	
W6RKC	187	17	11	CA	

*K6MI	156	13	12	CA	
K6EU	96	12	8	CA	
N6EE	72	12	6	CA	
N6REK	56	8	7	CA	
K6MUG	32	8	4	CA	
W6XU	9	3	3	CA	
NF6A (K6XX)	4	2	2	CA	
KH6TU	4	2	2	KH6	
K6CTA	4	2	2	CA	
KN6EVH	2	2	1	CA	
KF6F	1	1	1	CA	
W7RN (WK6I)	188,800	944	200	NV	NCCC Team #1
N7GP	65,772	522	126	AZ	AOCC PROSPECTORS
N7TY	60,228	478	126	AZ	AOCC PROSPECTORS
W6RW	59,160	510	116	AZ	AOCC PROSPECTORS
K2RD	41,531	349	119	NV	
K7TQ	40,704	384	106	ID	SWACC #2
W7VXS	37,740	370	102	WA	
KA6BIM	35,995	313	115	OR	NCCC Team #6
KF7U	33,759	363	93	AZ	AOCC PROSPECTORS
KI6QDH	26,460	294	90	WY	Grand Mesa
N9NA	25,872	264	98	AZ	AOCC PROSPECTORS
WA7LNW	20,880	240	87	UT	
K7VAP	18,486	234	79	WA	
WU6W	16,019	193	83	NV	NCCC Team #3
N7BV	13,332	202	66	WA	
WB6JJJ	11,476	151	76	OR	
*NN7SS (K6UFO)	10,944	152	72	WA	NCCC Team #5
KD6TR	10,586	158	67	WA	
N7VS	8,113	133	61	OR	
K7WP	7,300	100	73	AZ	
KE6K	7,040	128	55	AZ	AOCC WILD BUNCH
KJ9C	6,328	113	56	MT	
N1JM	5,358	114	47	AZ	AOCC WILD BUNCH
NG7M	5,002	122	41	UT	
K7GS	4,738	103	46	WA	
W7PU	4,708	107	44	WA	
K7BVT	4,633	113	41	OR	
WB7CYO	3,430	98	35	ID	
W7MTL	3,116	76	41	OR	
N7VGO	3,080	77	40	WA	
K7JQ	3,072	96	32	AZ	AOCC WILD BUNCH
AF6WF	2,772	84	33	AZ	
WA7CPA	2,592	72	36	WA	
K7AZT	2,448	68	36	AZ	
N7WY	2,352	98	24	WY	Grand Mesa Part-timers
WG7X	2,294	62	37	WA	
N7UVH	1,944	72	27	ID	
WB7GR	1,829	59	31	WY	
KB7AK	1,736	56	31	WA	

K7MY	1,650	55	30	AZ	
AE7DW	1,150	50	23	AZ	AOCC WILD BUNCH
WB7UOF	1,144	52	22	AZ	
K7VIT	1,012	46	22	OR	
KJ7MEB	969	51	19	UT	
KG7QXE	828	36	23	NV	
K7MSO	760	38	20	MT	
KG7VIZ	756	36	21	WA	SM Rockets
KE7GKI	390	30	13	AZ	
K6ST	378	27	14	NV	NCCC Team #5
AL7A	375	25	15	KL7	
*N6HI	360	30	12	AZ	
K6DGW	336	24	14	NV	NCCC Team #6
W7DCM	154	14	11	AZ	
AJ7M	98	14	7	WA	Drive
KE3K	38,306	358	107	MI	
NI8Z	33,063	321	103	OH	Splinter Group
K3JT	32,033	311	103	WV	
N8FYL	27,398	266	103	MI	
N8VV	23,577	271	87	OH	
WA8KAN	22,763	221	103	WV	
KI8I	22,090	235	94	WV	
K8PK	21,472	244	88	OH	Milford (OH) ARC
WS6K	18,601	209	89	OH	Milford (OH) ARC
K8RGI	17,380	220	79	OH	
WB8JUI	16,400	200	82	OH	
WT8WV	16,340	190	86	WV	Northeast Maryland Amateur Radio Contest Society
N8AA	15,714	194	81	OH	
AA8OY	12,994	178	73	OH	
N8TCP	12,040	172	70	OH	Splinter Group
KA8G	11,607	159	73	OH	
AB8OU	11,088	144	77	OH	
*W8UA	6,240	120	52	OH	
KB8O	6,048	112	54	OH	
AA8SW	4,700	94	50	OH	
AC8ZU	4,680	90	52	OH	SMC Menang
W8AKS	4,557	93	49	WV	
N8VWY	4,250	85	50	OH	
W3CB	4,140	90	46	MI	
AE8S	4,116	98	42	OH	Milford (OH) ARC
K8AJS	3,900	100	39	OH	
*KI9S/8	3,465	77	45	OH	Cornwall 1
N8WCP	2,470	65	38	OH	
WA8YZB	2,415	69	35	MI	
NE8J	1,472	46	32	MI	
W8WTS	580	29	20	OH	
AD8DM	270	18	15	OH	Milford (OH) ARC
W8TB	144	16	9	OH	
K9NW	132	12	11	OH	I-guana go to the TTY Bar
W4YPW	16	4	4	OH	

KG9Z	12	4	3	OH	
K9CT	129,200	760	170	IL	SMC Ganar
WT9U	122,615	685	179	IN	SMC Ganar
AI9T	111,840	699	160	IL	SMC Ganar
KD9MS	103,532	724	143	IL	SMC Vinna
K9WX	100,168	659	152	IN	
K9NR	92,416	608	152	IL	SMC Ganar
N7US	77,927	523	149	IL	SMC Ganar
KG9X	66,581	479	139	IL	SMC Vinna
AC9S	59,362	443	134	IL	
N9CK	58,880	460	128	WI	SMC Menang
WB8BZK	56,718	411	138	IL	SMC Kushinda
AC9KW	54,600	390	140	IL	SMC Vinna
N2BJ	50,274	441	114	IL	SMC Menang
W9ILY	50,048	368	136	IL	Metro Mayhem
WD9CIR	46,065	415	111	IL	SMC Gagner
N9EP	40,680	339	120	IL	
KT9L	39,468	299	132	IN	SMC Vinna
N9TF	34,196	332	103	IL	SMC Sieg
KC9K	33,390	318	105	IL	SMC Vincere
K9SE	32,508	301	108	IN	
AA9L	31,860	295	108	WI	
ND9G	29,498	301	98	IL	SMC Kushinda
N9OK	29,070	255	114	IL	
WB9HFK	28,943	281	103	IL	SMC Vinna
N5RP	27,336	268	102	IL	Maskless Covid Marauders
W9FFA	27,249	293	93	IN	SMC Sieg
N9TK	26,230	305	86	IL	Metro Mayhem
N9JF	24,354	246	99	IL	SMC Sieg
N9WEW	23,760	240	99	IL	
K9IG	23,205	255	91	IN	SMC Gagner
K9ZO	22,048	212	104	IL	
N9DR	21,922	226	97	IN	SMC Gagner
W9LU	21,297	229	93	IN	
WB9B	19,780	230	86	IL	
KC9EOQ	19,320	210	92	IL	SMC Vincere
K9DUR	18,920	220	86	IN	SMC Gagner
WB9TFF	17,630	215	82	WI	
KW9U	17,199	189	91	IL	SMC Menang
K9MMS	17,114	199	86	IL	
K9PY	16,170	210	77	IL	Metro Mayhem
N9LQ	15,760	197	80	IL	SMC Menang
KY0Q	14,705	173	85	IL	
K9IR	13,475	175	77	IL	
NS9I	12,616	166	76	WI	
NR9K	12,367	149	83	IL	
AA9DL	12,367	149	83	IN	
W9TAM	12,261	183	67	IL	
N9TCA	11,700	156	75	IL	SMC Sieg
AD9I	11,431	161	71	IL	SMC Vincere



K9UC	11,130	159	70	WI	
WB9TFH	8,514	129	66	WI	
N9VPV	7,638	114	67	IL	SMC Sieg
W9KG	7,420	140	53	IN	
K9CW	7,245	115	63	IL	SMC Vincere
WI9WI	6,776	121	56	WI	SMC Zmaga
WA9LEY	6,519	123	53	IL	Metro Mayhem
W9XT	6,438	111	58	WI	SMC Vincere
N9SE	5,929	121	49	IN	SMC Kushinda
WT2P	5,670	105	54	IL	
WB9YIG	5,550	111	50	IN	
KC9TZO	5,280	120	44	WI	SM Rockets
KT9AC	5,252	101	52	WI	
KB9S	5,044	97	52	WI	
WB9DAR	4,680	90	52	IL	
K9GY	3,796	73	52	IL	SMC Kushinda
KC9YL	3,713	79	47	WI	SMC Zmaga
N9UN	3,588	78	46	IN	
AJ9C	2,360	59	40	IN	I-guana go to the TTY Bar
WB8RFB	2,337	57	41	IL	SMC Zmaga
W9IZ	1,820	52	35	IN	I-guana go to the TTY Bar
AI9K	1,564	46	34	IL	
N9LF	1,508	52	29	IN	
NJ9R	1,440	45	32	IL	
KR9U	1,148	41	28	IN	
KA9VLC	1,053	39	27	IL	
N9LJX	966	42	23	IN	
N9SJ	792	36	22	IL	
N9KJU	660	30	22	IL	
W9RE	630	30	21	IN	SMC Gagner
KG9N	420	28	15	IL	
KD9NHZ	350	25	14	IL	
NG9R	266	19	14	IL	SMC Zmaga
K9EL	210	15	14	IL	
W9SE	204	17	12	IL	
*KC9BKS	195	15	13	IL	
WA0JTL	99	11	9	IN	
AB3AI	72	9	8	IN	Cornwall 1
K9PG	49	7	7	IL	
N0XR (@N0NI)	165,300	870	190	IA	SWACC #1
W0LSD	155,117	857	181	CO	Grand Mesa
W7RY	86,580	585	148	MO	The Borg
WD0T	82,050	547	150	SD	RTTY NORTHCENTRAL
N0AT	73,440	540	136	MN	MWA 1
K0WA	69,696	576	121	KS	Deep Dixie CC Team Elvis
K0AD	66,420	492	135	MN	MWA 3
W7II	62,640	464	135	IA	
W0MB	59,902	491	122	MO	
AB0S	54,243	441	123	KS	Deep Dixie CC Team Elvis
N0TA	48,026	407	118	CO	Grand Mesa

AE0A	47,628	486	98	SD	
W5AP	38,710	395	98	CO	
K0JJR	32,804	278	118	MN	MWA 1
KFOUR	31,680	330	96	CO	
W0TM (N00J)	31,341	337	93	CO	Grand Mesa Part-timers
KIOI	28,270	257	110	MO	
AA0AW	27,930	266	105	MN	MWA 2
WROH	26,967	267	101	MO	SMC Kushinda
N0BUI	21,888	288	76	MN	MWA 1
WT0DX	19,320	280	69	CO	Grand Mesa
W0DB	17,280	240	72	NE	RTTY NORTHCENTRAL
WB0N	17,170	170	101	MN	
KIOJ	16,906	214	79	CO	
N0IS	14,283	207	69	MO	
NW0M	14,184	197	72	MO	
N0OK	13,528	178	76	MN	
K0TC	11,786	166	71	MN	
AIOY	9,891	157	63	MN	
AC0W	7,800	120	65	MN	MWA 2
KV0I	7,040	128	55	NE	
WB0WIV	6,572	106	62	IA	
W0ETT	5,376	96	56	CO	Grand Mesa Part-timers
K0VG	5,088	96	53	MN	MWA 3
W0AAE	4,141	101	41	MN	MWA 1
W0DC	4,032	84	48	MN	
W8LYJ	2,829	69	41	CO	
WA0LIF	2,340	60	39	MN	
AD0WB	2,275	65	35	CO	
AA0FO	2,196	61	36	KS	
*W6GMT	2,035	55	37	MN	MWA 2
NU0W	1,995	57	35	MN	
K0SRL	1,904	56	34	IA	
KC0NFB	1,568	49	32	MN	MWA 1
AA0Z	1,363	47	29	MO	
AC0E	1,260	45	28	KS	
K0MPH	1,107	41	27	MN	
W0HRO	1,050	42	25	MO	
AB4BA	875	35	25	CO	
NE0DA	817	43	19	CO	
N0EHX	432	27	16	CO	
WA0EJX	100	10	10	CO	
N2RSC	81	9	9	MN	
KE0TL	16	4	4	MN	MWA 3
VA3DF	78,396	564	139	ON	
VE5MX	65,136	472	138	SK	
VE3CX	51,480	429	120	ON	
VE3PJ	47,838	402	119	ON	
VE3KI	44,346	389	114	ON	
VE3MGY	44,226	378	117	ON	CanAm2020
VE3JI	40,293	333	121	ON	

VA3LR	27,200	272	100	ON	
VE6UM	25,956	309	84	AB	
VE2CSM	25,844	284	91	QC	CGQ#1
VE3GYL	25,575	275	93	ON	
VE7KAJ	18,900	252	75	BC	
VE7BC	18,642	239	78	BC	
VE3FH	16,351	197	83	ON	
VE2EBK	14,744	194	76	QC	CGQ#1
VE5KS	13,600	170	80	SK	
VE3/K0MKL	12,960	162	80	ON	
VA1CHP	12,190	230	53	NS	
VA6RCN (VE3RCN)	10,570	151	70	AB	
VA7GP	9,086	154	59	BC	
VA3ROC	7,080	120	59	ON	
VA3PC	6,664	119	56	ON	
VE2GHO	6,032	116	52	QC	
VE3TW	5,508	102	54	ON	
VE3RUA	5,406	102	53	ON	MWA 3
VA3WW	4,488	88	51	ON	
VE4DL	4,100	82	50	MB	
VA2SIB	3,552	96	37	QC	
VE2PI	2,759	89	31	QC	CGQ#1
VE3MCF	2,048	64	32	ON	
VE7BGP	1,548	43	36	BC	
VE3KTB	1,344	48	28	ON	
*VE3HG	1,222	47	26	ON	
VA2KLG (VA2OBD)	1,144	52	22	QC	
VE7IO	1,012	44	23	BC	
*VE3KJQ	1,008	48	21	ON	
VA3IK	600	25	24	ON	
VE9BWK	550	25	22	NB	
VE7AF	169	13	13	BC	
NP3V	5,320	133	40	KP4	
KP4JRS	4,068	113	36	KP4	
*CO3JK	322	23	14	CM	
F4DSK	1,440	48	30	DX	
OH2LU	30	6	5	DX	
PY2NY	12	4	3	DX	

\* QRP

### Multi-Two Scores

Call Sign	Score	QSOs	Mults	QTH	Operators
W5WZ	187,740	1043	180	LA	W5WZ, WM5H
NV9L	166,944	888	188	IL	NV9L, WB9Z
WV4P	166,617	891	187	TN	NR4L, WV4P
W4MLB	112,942	758	149	FL	WB5ZGA, KK4ZWC, N4EN, W7TSO, KE0NRY, K4ILG
N3QE	105,230	619	170	MD	N3QE
K3MTR	99,022	643	154	MD	N3DPB, WA3EKL, KB3VQC, K6ZO, K3MTR

K3AJ	89,498	613	146	MD	K3AJ, W3MAM
N1MGO	83,840	641	131	MA	N1MGO, KT1I
K3CCR	83,820	635	132	MD	W3GB, N3UM
N3RC	78,768	547	144	CA	N3RC
W3LL	69,230	430	161	MD	W3LL
K4XL	58,764	498	118	VA	K4XL
K6DTT/1	55,428	447	124	ME	K6DTT/1
AB5EB	51,051	429	119	TX	AB5EB, NK5P, WQ5C
W3GH	47,674	394	121	PA	AC3GB, KG4MSB, KC3LHW, WC3O
K7BTW	42,790	389	110	WA	K7BTW
N3MN	38,796	366	106	VA	N3MN
AB9YC	36,448	268	136	IL	AB9YC
VE2FK	34,560	384	90	QC	VE2FK
AF6SA	33,488	299	112	CA	AF6SA
W1IE	32,240	310	104	VA	W1IE
W9AV	30,485	335	91	WI	W9AV
K4IU	23,422	239	98	MN	K4IU
W9PA	20,412	189	108	IN	W9PA
N9TR	20,140	212	95	NY	N9TR, N8CL
WA9IVH	17,472	192	91	IL	WA9IVH
VE3MZD	17,177	193	89	ON	VE3MZD
K3AU	16,632	189	88	MD	K2YWE
KD3TB	15,521	187	83	PA	KD3TB
K0BX	14,058	198	71	MO	K0BX
K4GM	13,035	165	79	VA	K4GM
W1BQ	11,410	163	70	FL	W1BQ
K2MK	9,516	156	61	FL	K2MK
W3GVX	9,438	143	66	MD	W3GVX
K6NV	9,174	139	66	CA	K6NV
KG3V	8,470	121	70	VA	KG3V
NN3RP	8,432	136	62	DC	NN3RP
N5YJZ	8,384	131	64	CA	N5YJZ
AB3CV	8,320	130	64	MD	AB3CV
KC3OOL	8,083	137	59	MD	KC3OOL
AD8FD	7,844	148	53	OH	AD8FD
W4EE	7,740	129	60	FL	W4EE
W3IDT	6,426	126	51	MD	W3IDT
AC6ZM	6,300	126	50	TN	AC6ZM
AD5XI	6,240	104	60	MD	AD5XI
W9YK	6,206	107	58	IL	W9YK
W9OA	6,120	120	51	IL	W9OA
NJ1F	6,060	101	60	NY	NJ1F, K1RQ
K4MGE	6,004	158	38	TN	K4MGE
N3HEE	5,300	100	53	MD	N3HEE
W3YY	4,608	96	48	VA	W3YY
W4THI	4,094	89	46	FL	W4THI, KN4NZH
VE3WEJ	4,080	80	51	ON	VE3WEJ
WD6T	4,018	98	41	CA	WD6T
W7CO	3,666	94	39	OR	W7CO
K8BL	3,225	75	43	OH	K8BL
K6KM	2,405	65	37	CA	K6KM

K5GZR	2,065	59	35	TX	K5GZR
K5LGX	1,961	53	37	TX	K5LGX
WN8Y	1,881	57	33	TN	WN8Y
K2WK	1,798	58	31	VA	K2WK
ND3D	1,792	64	28	MD	ND3D
WC7Q	1,776	48	37	WA	WC7Q
W8XY	1,716	52	33	OH	W8XY
KS0CW	1,488	48	31	VA	KS0CW
K3KZU	1,440	48	30	KY	K3KZU
KC3ODW	1,421	49	29	MD	KC3ODW
KY4KD	1,323	49	27	KY	KY4KD
W1FSH	1,320	55	24	MA	W1FSH
N5KB	1,184	37	32	IA	N5KB
W5GFI	736	32	23	OK	W5GFI
N3MM	638	29	22	VA	N3MM
KM4RK	546	26	21	SC	KM4RK
N4LF	81	9	9	DE	N4LF
K0KEV	70	10	7	MO	K0KEV

**Check Logs**

AA8R, AC6BW, AK2S, DJ3IW, GW5NF, K0VW, K1BZ, K2PAL, K7QA, KG0TW, N2LEE, N7XCZ, N8OO, NF4A, NN9C, VE3NZ, W1AJT, W1N, W2CDO, W4GHV, W4UEF, W4UK, W7GRA, WA0BSW, WA2MCR