

# Results: North American QSO Party, SSB — August 2021

As in most radiosport events, the NAQPs have rules to participate by. Rules help create a level playing field for different groups of operators. Not only do they discourage specific activities, they provide challenges for the operators, such as multipliers and off-time. While multipliers offer a method to enhance your score, the challenge is to maximize the number of multipliers worked while keeping a high QSO rate. Off-times add the challenge to select windows of operating time that maximize rates and multipliers.

Then there is the side that we contest managers deal with: rule interpretation. If you have questions on

how you “read” a rule, reach out to the contest manager *before* the contest for clarification. After a contest, we must avoid answering you in a way that might cause you to change your

log. So, sometimes a response will be delayed until after logs are all in.

This leads into the big news on the street: the NAQP rules for 2022 have added a Single-Operator Assisted (SOA) category. This change may not be as big as you think, though. In a careful reading of the 2021 rules, you will find an avenue for operators who enjoy assisted operating to participate. The August NAQP SSB results include 78 SOA entries, although these are not readily obvious since they’re included with the Multi-Two (M2) entries. To put it into perspective, more than 70% of the M2 entries are SOA.

When I started as contest manager 10 years ago, only 15% of the M2 entries were SOA. It is long past the time we can return the genie to the bottle to fix the issue of the M2 category being predominantly SOA.

Prior to making the rule change, NAQP contest managers reached out to 27 contest club presidents for their opinions, and 90% of those responding favored the change; only one response indicated strong opposition.

The group involved with formulating the rules agreed to move forward to add the new category and return the M2 category to strictly multioperator entries. Yes, this will change the event and add a challenge of dealing with spotting-induced pileups. Even with the change, I hope participants will work to keep it the fun-friendly event we all have come to enjoy over the years.

The rules are very specific that multioperator entries must have two or more operators. Single operators submitting as M2 most likely will see their entry category changed to SOA. If they operated more than 10 hours, only the first 10 hours will be scored, with the remainder of the log used as

## Combined CW/SSB NAQP Operator Scores

Call Sign	Total	CW Points	SSB Points
KØEU	887	387	500
K9CT	860	407	453
N5ZO	860	467	393
K3MM	689	316	373
K2RD	635	265	370
WB9Z	621	253	368
N4OO	577	173	404
N1LN	568	261	307
K5RT	563	240	323
WT9U	543	282	261

## Single-Operator Top 10

Call Sign	Score	QSOs	Mults	160	80	40	20	15	10
KØEU	185,130	1210	153	18/12	82/35	464/53	644/51	1/1	1/1
K9CT	168,084	1044	161	59/29	139/41	518/54	323/33	4/3	1/1
ACØW	163,415	1015	161	24/16	184/46	423/55	384/44	0/0	0/0
N4OO	149,730	966	155	20/12	188/45	564/54	190/40	3/3	1/1
N5ZO	145,855	941	155	12/5	103/31	266/54	554/59	5/5	1/1
ND7K (W4IX)	140,275	905	155	17/10	64/29	387/53	425/51	12/12	0/0
K3MM	138,150	921	150	30/15	239/35	322/48	291/39	20/8	19/5
K2RD	137,250	1098	125	4/3	19/9	382/54	693/59	0/0	0/0
WB9Z	136,512	948	144	52/21	165/35	467/53	260/31	4/4	0/0
KW8N	134,113	833	161	57/26	255/49	285/50	232/32	2/2	2/2

## Single-Operator QRP Top Five Breakdowns

Call Sign	Score	QSOs	Mults	160	80	40	20	15	10
AA5KD	3,496	92	38	0/0	0/0	27/14	65/24	0/0	0/0
KS4X	2,829	69	41	0/0	4/4	32/15	33/22	0/0	0/0
KD9NYE	2,812	74	38	0/0	30/11	26/15	18/12	0/0	0/0
KD4IZ	2,664	72	37	1/1	20/11	33/16	13/7	2/1	3/1
K7DLX	2,528	79	32	0/0	9/4	45/16	25/12	0/0	0/0

## Single-Op Youth (25 years old or younger) Breakdowns

Call Sign	Score	QSOs	Mults	160	80	40	20	15	10
WØAAE	58,176	606	96	0/0	21/10	364/49	221/37	0/0	0/0
ND6O	25,350	338	75	0/0	13/5	78/24	247/46	0/0	0/0
WØABG	8,415	187	45	0/0	21/9	0/0	164/34	2/2	0/0
W7RGS	2,100	75	28	0/0	0/0	67/22	8/6	0/0	0/0
W1SSS	108	12	9	0/0	0/0	6/4	6/5	0/0	0/0
KØEEM	60	10	6	0/0	0/0	0/0	10/6	0/0	0/0
KE8FAE	48	8	6	0/0	0/0	8/6	0/0	0/0	0/0
K2HVE	18	6	3	0/0	0/0	6/3	0/0	0/0	0/0

## Multi-Two Breakdowns

Call Sign	Score	QSOs	Mults	160	80	40	20	15	10
WW4LL	270,930	1642	165	25/14	267/43	682/59	668/49	0/0	0/0
NU5A	269,496	1620	171	10/8	69/29	589/58	872/56	34/18	2/2
WX3B	239,200	1497	160	27/16	286/41	841/60	331/37	5/4	5/2

a check log.

With life returning somewhat to normal and with travel restrictions removed, participation levels are closer to pre-pandemic levels. August 2021 saw 877 logs submitted. This is an improvement from the 800 logs submitted in 2019 but far short of the 1,178 submitted in 2020.

Congratulations to the following winners in the August 2021 NAQP SSB:

Single Operator	Randy KØEU
Single Op QRP	Duane AA5KD
Multi-Two	WW4LL (ops WW4LL, W1MD, K4NV, NN3W)
Combined Score	Randy KØEU
Team Competition	SMC George Washington (ops K9CT, WB9Z, WT9U, W9RE)

Thank you to everyone for participating and hope to see you in the January event. Please note: the January NAQPs are 1 week *later* in 2022, because New Year's Day falls on the first Saturday. So, the next NAQP SSB will take place on Saturday, January 22. Log-checking reports are available upon request to [ssbnaqpmgr@ncjweb.com](mailto:ssbnaqpmgr@ncjweb.com).

## Team Scores

### 1. SMC George Washington

K9CT	168,084
WB9Z	136,512
WT9U	96,691
W9RE	52,393
<b>Total</b>	<b>453,680</b>

### Team

- SCCC
- GM Fur Trappers
- NCCC Team #1
- PVRC SO2R Team #1
- SECC#1
- SFCG Palmetto Pulsars
- MRRRC/NCC
- FRC Team C64
- Deep Dixie CC Team Elvis
- Old Age and Treachery
- Flying Iguanas
- KCG Team A
- PVRC North Carolina East Team #1
- MWA # 2
- ORANGE CRUSH 2
- SMC John Adams
- NCCC Team #2
- Youth
- FRC Team PDP11
- SECC#2
- ORANGE CRUSH 1
- PVRC Northwest Team #1
- Boiled Owls
- SMC James Monroe
- SMC James Madison
- LAKERS1
- FRC Team TRS80
- PVRC MD Metro Team #1
- ORANGE CRUSH 3
- NCCC Team #3
- Metro Screamers
- Braille Team
- SMC William Henry Harrison
- KWARC Two
- SMC Martin Van Buren
- Silver Springs Radio Club
- SMC Thomas Jefferson
- SMC Andrew Jackson
- AOCC Wranglers
- KCG Team B
- SMC John Quincy Adams
- Skill
- Deep Dixie CC Team Magnolia
- TDXS
- KWARC One
- Bristol Dipoles
- GM Green River Rendezvous
- NPARC Team Blue Moon
- NCCC Team #4
- CORNWALL
- MWA # 3
- LAKERS2
- PVRC Purcellville Blue Ridge Team #1
- El Rey and his Court
- Metro Shouters
- Knock Knock... Taliban!
- USUCC #1
- NCCC Team #6
- HAMARC Team #2
- Eastern Ohio Contesters
- NCCC Team #5
- Western PA Wounded Hams
- PVRC Tidewater Team #1
- NPARC Team Jupiter
- Team Top Left
- HAMARC Team #1

### 2. MWA # 1

ACØW	163,415
KØAD	60,424
NØXT	51,039
KØEA	41,850
NØAT	12,243
<b>Total</b>	<b>328,971</b>

### Operators

N5ZO, W6TK, K6RO, WN6K, WQ6X	278,967
KØEU, WØETT, KH6CJJ, WY7M	260,128
WC6H, AE6Y, K6GHA, KA6BIM, N6ZFO	251,979
K3MM, K4ZW, K7SV	244,594
N4OO, K4BAI, N4OX, AA4LR, NJ8J	241,085
WA2BCK, NU4E, K3DNE, K4QQG, KY4ID	226,855
KW8N, NA8V, AB8OU, W8WTS	211,606
WA2CP, KA2K, K3WJV, K3TS, AC3LZ	210,237
KT4Q, NR4L, AC6ZM, N4XL, N8AA	181,644
K5RT, KI5MM, K5DHY	178,568
KP4AA, AJ9C, WT2P, K9NW	136,387
ND4Y, WX4W, KE4KY, K4FN	135,414
N1LN, NR4O, N4CWZ, N3CKI	132,764
WØAAE, K4IU, KAØPQW	124,526
WØ4O, KM4HI, K4EJ, WI9WI, KP2OJ	103,842
W9QL, W9XT, KC9K, KC9EOQ	97,660
W6DMW, W1SRD, K7GK, AJ6V	85,284
WBØTEV, WA5LXS	84,446
NW3Y, AA3B, N3NR	84,136
AA5JF, W4DD, WC4Y, KI4MYD	76,799
KP2RUM, K4SBZ, KØLUV, NK4O, K4FCG	72,881
WB2ZAB, WR3R, AB3CV, N3WD	71,208
W2JV, AH2O, KS2G, KA2D	70,197
KR9U, KD9GY, W9POL, K9LA, KC9YL	69,128
W9YK, WB8BZK, N9WEW, ND9G, N9JF	64,342
KD2KW, K5YX, KF5OMH, KF5VO	51,399
N2NC, K2RET, WA3AAN, W3WHK	48,712
N1EK, W2CDO, K3KU	47,211
K5KG, NE8P	46,990
N6WM, W6PZ, AE6JV, N6XI	44,928
W9ILY, WA9LEY, N2BJ, N9TK, K9GA	44,191
KB8TYJ, K5XU, KW3A	39,614
KD9V, N7US	39,033
VE3YT, VE3HZ	35,698
N5RP, N9DR, AKØM, WA9PND, AF9J	31,608
NA4DA	30,618
K9DUR, K9WX, K9MMS, AB9YC	27,282
N9EP, W9FFA, N9CO, W9PI	24,466
KE6K, N7LR, N7RQ, AA7V, N9NA	17,328
N4JRG, K4WW, K4AVX, KJ4YLR	16,941
KK9V, K9LC, KC9EE, K9KM, KK9N	16,403
N6GQ, NW5Q, KM5JV	14,034
K3DMG, W4SSF, K4AFE	13,473
N5DTT, W9LCQ, NM5G	12,608
VA3DKL, VA3IJK, VA3PAF, VA3BCV	11,173
N4DW, K4DR, AA4DD	10,250
N7WY, WØZA, KCØVDY	9,801
K2AL, W2IOC	9,740
KH7Y, AF6SA, K6CSL, K6KM	9,633
N3CU, KA3D, AB3AI, N3RM	8,660
KØJP, W6GMT, KØMKL	8,273
K5MAY, AC5EZ, WE5TR, K5VOP	8,198
KE4S, W4RN	7,760
W9IZ, W4DTA	7,606
NV9X, NE9A, K9EL	7,385
K5NZ, K5BG, K5GA	5,747
K7DLX, W7RGS	4,628
WD6T, KA6W, N6TTV, K9JM	3,970
N8SDR, N8YX	3,910
KE8E, AC6GO, WA8ZNC	3,884
WK6I, NN7SS, K6ELE, N3RC	2,659
KA3PMW, KC3ANX	2,349
W4VIC, K4ME, K4IMP	2,011
W2PTP	1,767
VE7KPM	1,215
WB8TCB, KB8HWG	1,005

## Single Operator Scores

Call Sign	Score	QSOs	Mults	QTH	Call Sign	Score	QSOs	Mults	QTH	Call Sign	Score	QSOs	Mults	QTH
KK1L	110,500	850	130	VT	KA3D	2,088	58	36	PA	KE0L	5,586	114	49	TN
N1DFD	36,456	434	84	ME	N3WS	1,568	56	28	PA	W4BTW	5,508	108	51	NC
W1AW (W50V)	30,360	506	60	CT	KA3PMW	1,485	55	27	PA	KE4S	5,460	105	52	VA
NG1M	13,482	214	63	RI	N3XL	1,428	51	28	MD	KD4MM	5,382	117	46	VA
W1FJ	10,545	185	57	MA	AB1F	1,350	54	25	MD	KN4BIT	5,250	105	50	NC
AE6JV	9,240	140	66	NH	K3PP	1,300	52	25	PA	K4WW	5,160	120	43	KY
AC1EV	8,085	165	49	NH	W2MC	1,232	44	28	PA	KY4ID	5,040	105	48	SC
W1SJ	4,752	99	48	VT	N3ASO	1,120	40	28	PA	AF4T	4,947	97	51	TN
KC1MXB	2,520	72	35	ME	KB3LYB	1,050	42	25	PA	AA4HV	4,725	105	45	TN
K1HC	2,211	67	33	MA	AC5XK	880	44	20	DC	K4ORD	4,554	99	46	VA
N1ADX	1,431	53	27	VT	KC3ANX	864	36	24	PA	WB4HRL	4,429	103	43	SC
AB1XQ	1,368	57	24	VT	WA1HEW	684	38	18	PA	N3CKI	4,361	89	49	NC
N1TAA	1,222	47	26	CT	N3LSB	646	34	19	MD	K5EEE	4,294	113	38	FL
K1SM	880	44	20	MA	KE3X	640	32	20	DC	KB4EE	4,266	79	54	FL
AA1F	680	34	20	MA	KC3JNW	551	29	19	PA	N4MCC	4,263	87	49	TN
W1ZFG	570	30	19	CT	KG4USN	544	32	17	MD	AJ4LN	4,158	99	42	VA
KM1NDY	450	30	15	MA	KD3CR	494	26	19	MD	W4BBT	3,937	127	31	NC
KE1VT	288	24	12	VT	N3RM	315	21	15	PA	WN4AFP	3,838	101	38	SC
*W1SSS	108	12	9	MA	AG3I	280	20	14	PA	W1GKT	3,822	98	39	AL
N1CEO	96	12	8	MA	W3MR	252	21	12	MD	K4JSK	3,822	98	39	NC
					KC3BXN	156	13	12	MD	W4SSF	3,774	102	37	TN
WA2BCK	75,625	625	121	NY	N3WD	108	12	9	PA	N1SUZ	3,360	112	30	SC
WA2CP (KC2GOW)	59,430	566	105	NY	K3BZZ	30	6	5	MD	KA4JRY	3,320	83	40	GA
KA2K	52,224	512	102	NJ	WA4GUD	25	5	5	MD	*KS4X	2,829	69	41	TN
W2MKM	46,500	500	93	NJ	KB3RKM	24	6	4	PA	KY4MAK	2,812	74	38	KY
W2JV	33,534	414	81	NY	NS3L	16	4	4	PA	K4YCR	2,584	68	38	VA
K3TS	32,663	367	89	NJ	KB3ZGL	4	2	2	MD	AK4D	2,520	90	28	NC
AH2O	22,011	319	69	NY						W4RN	2,300	100	23	VA
N2NC	21,251	269	79	NJ	N4OO	149,730	966	155	GA	WA4JA	2,257	61	37	TN
K2RET	15,900	212	75	NJ	N1LN	114,026	803	142	NC	K4DR	2,160	72	30	TN
WA2JQK	15,563	197	79	NY	KT4Q	95,420	734	130	NC	N4NTO	1,980	60	33	NC
KS2G	12,296	212	58	NY	NU4E	72,292	583	124	SC	KK4PJ	1,944	72	27	FL
WA2DNI	8,084	172	47	NY	NR4L	71,390	605	118	TN	K4SHW	1,914	66	29	GA
NS2N	7,874	127	62	NY	ND4Y	70,112	626	112	KY	KU4FX	1,829	59	31	FL
K2AL	5,900	118	50	NJ	K3DNE	66,670	590	113	SC	N4XL	1,785	51	35	SC
N2RC	5,104	116	44	NY	AD4EB	62,628	614	102	TN	K4FN	1,770	59	30	KY
K7RB	4,972	113	44	NY	K4ZW	56,180	530	106	VA	K4FW	1,769	61	29	VA
WA2QAU	4,512	94	48	NY	N4ZZ	55,678	574	97	TN	K8RAR	1,769	61	29	FL
KA2ENE	4,182	102	41	NY	K7SV	50,264	488	103	VA	N8AID	1,749	53	33	VA
W2IOC	3,840	96	40	NJ	WO4O	46,592	448	104	FL	N3AC	1,656	69	24	VA
KA2D	2,356	76	31	NY	K4BAI	45,011	437	103	GA	W3DQS	1,632	51	32	NC
W2PTP	1,767	57	31	NJ	KM4HI	42,640	410	104	FL	NN4RB	1,530	51	30	VA
N2PTF	1,222	47	26	NY	K5KG	42,350	385	110	FL	K4GM	1,508	58	26	VA
KD2REH	1,150	46	25	NY	WX4W	38,548	419	92	KY	W4VIC	1,456	52	28	VA
ND2X	912	38	24	NY	AA5JF	35,026	422	83	GA	AB3AI	1,296	54	24	GA
K2IRK	493	29	17	NY	NA4DA	30,618	378	81	FL	W4PK	1,296	48	27	VA
KC2PDO	200	20	10	NJ	K2KW	30,527	343	89	VA	N6DW	1,225	49	25	VA
KG2F	200	20	10	NJ	K0EJ	27,930	399	70	TN	NZ6T	1,222	47	26	VA
KX1W	176	16	11	NJ	KE4KY	24,984	347	72	KY	K4AVX	1,200	50	24	KY
WA2LK	80	10	8	NJ	AC4G	24,910	265	94	TN	N4RWH	1,189	41	29	FL
N2EZY	72	12	6	NY	N4OX	23,249	347	67	FL	KJ4YLR	1,161	43	27	KY
K2HVE	18	6	3	NJ	K4XL	19,125	255	75	VA	AD4IE	1,160	40	29	NC
K2JF	1	1	1	NY	K4SBZ	18,574	251	74	FL	WB5WAJ	1,148	41	28	TN
					KM4OZ	16,940	242	70	GA	K4AFE	1,144	44	26	TN
K3MM	138,150	921	150	MD	W9DC	16,472	232	71	SC	K3WA	1,120	40	28	NC
WB2ZAB	58,752	544	108	MD	W4YE	16,401	231	71	VA	WA4IPU	1,107	41	27	FL
NW3Y	45,955	455	101	DE	N4GU	16,185	249	65	NC	K4JMG	1,035	45	23	GA
K3WJV	42,536	409	104	PA	W4DD	15,876	252	63	GA	W4DTA	950	38	25	TN
N1EK	29,484	364	81	MD	AA4LR	15,795	243	65	GA	K4FCG	864	36	24	FL
K3WW	28,644	308	93	PA	K0LUZ	15,753	267	59	FL	AA4XG (W4ATL)	836	38	22	GA
AC3LZ	23,384	316	74	DE	NK4O	15,330	210	73	FL	WB8RGE	820	41	20	KY
AA3B	22,104	307	72	PA	WC4Y	14,820	228	65	GA	AA4DD	782	34	23	TN
K9RS	21,627	267	81	DE	W4WWQ	14,536	184	79	VA	AC3D	780	39	20	TN
W3DQ	18,122	221	82	DC	AC6ZM	11,774	203	58	TN	K4FMI	740	37	20	NC
N3NR	16,077	233	69	PA	WA3LXD	11,680	160	73	FL	K2SD	666	37	18	NC
AA3S	13,651	187	73	MD	KI4MYD	11,077	209	53	GA	N4JKO	570	30	19	KY
W3SO (W3XOX)	12,449	211	59	PA	AI4DB	10,855	167	65	TN	N4QI	560	28	20	SC
W2CDO	11,102	182	61	MD	KE4Q	10,678	281	38	FL	K4ME	551	29	19	NC
KW3A	10,850	175	62	PA	N4CF	10,230	165	62	VA	W4WVVV	513	27	19	TN
WA3FAE	10,521	167	63	MD	WO4ROG	9,538	251	38	NC	KC4LZN	459	27	17	FL
WR3R	9,016	161	56	MD	N4JRG	9,420	157	60	KY	WD8RYC	440	22	20	TN
N3DUE	8,142	138	59	MD	K4EJ	8,568	168	51	FL	N4TPT	437	23	19	KY
WA3AAN	6,721	143	47	PA	NR4O	8,437	143	59	NC	KM4SK	391	23	17	VA
K3KU	6,625	125	53	MD	N2YO	8,208	152	54	VA	N3AO	390	30	13	VA
4U1WB (AJ3M)	6,160	140	44	DC	N4DW	7,308	126	58	TN	*W4UT	294	21	14	TN
N3CU	4,961	121	41	PA	NJ8J	7,300	146	50	GA	KB4LA	273	21	13	AL
W3WHK	4,840	110	44	PA	K4QQG	7,228	139	52	SC	WU8D	234	18	13	SC
KD3H	3,441	93	37	MD	K4HQK	6,413	121	53	VA	KW4LU	221	17	13	TN
KE3GK	3,397	79	43	MD	K3YDX	6,325	115	55	NC	K9RDU	216	18	12	NC
AB3CV	3,332	98	34	MD	W6NCB	6,210	135	46	TN	KY4WVVF	154	14	11	KY
K1EFI	3,096	86	36	MD	N3KN	6,160	140	44	VA	WA2OMT	120	12	10	VA
N3AM	2,736	72	38	MD	NC4MI	6,148	116	53	NC	K4LDW	49	7	7	VA
KQ3W	2,720	68	40	MD	W4EE	6,104	109	56	FL	KK4CS	35	7	5	GA
*KD4IZ	2,664	72	37	MD	W4AWM	6,016	188	32	VA	KD4QMY	20	5	4	GA
*W7LG	2,340	65	36	PA	N4CWZ	5,940	132	45	NC	K4IMP	4	2	2	NC
					WD4FMG	5,668	109	52	VA	KM4PIH	1	1	1	FL



Call Sign	Score	QSOs	Mults	QTH	Call Sign	Score	QSOs	Mults	QTH	Call Sign	Score	QSOs	Mults	QTH
K5RT	119,880	888	135	TX	N6TQ	6,832	122	56	CA	*K7DLX	2,528	79	32	UT
WB0TEV	81,708	619	132	TX	K6JS	6,783	133	51	CA	W7CEG	2,511	81	31	WA
KD2KW	40,139	451	89	TX	W6IA	6,364	148	43	CA	K7JQ	2,485	71	35	AZ
WA5JMZ	40,035	471	85	TX	N6YEU	5,110	146	35	CA	AA7V	2,360	59	40	AZ
KB5KYX	37,296	504	74	TX	KH7Y	4,900	100	49	CA	W7RGS	2,100	75	28	UT
KI5MM	32,640	384	85	TX	W6AAE	4,655	95	49	CA	N7TPR	1,829	59	31	WA
W5RJJ	28,012	298	94	NM	AJ6CE	4,559	97	47	CA	W7WEC	1,736	62	28	WA
K5DHY	26,048	296	88	TX	AI6LY	4,557	93	49	CA	N7AME	1,624	56	29	WA
N5TJ	22,712	334	68	TX	WA6URY	4,480	128	35	CA	*W2RUN	1,512	56	27	MT
W5TMC	19,032	244	78	OK	AF6SA	4,114	121	34	CA	N7DX	1,452	66	22	WA
W5GFI	16,350	218	75	OK	N6XI	3,990	105	38	CA	WN7Y	1,148	41	28	MT
K5PI	14,790	290	51	TX	N6AJS	3,400	85	40	CA	AI7EQ	1,080	45	24	OR
K5XU	12,444	183	68	MS	K2DMS	3,268	76	43	CA	W7LRM	882	42	21	OR
WW5L	11,480	164	70	LA	NN6DX (W1PR)	2,448	68	36	CA	*NN7SS (K6UFO)	805	35	23	WA
K5YX	9,000	150	60	TX	WD6T	1,792	64	28	CA	AG7AB	782	34	23	AZ
KI0R	7,946	137	58	TX	WK6I	1,643	53	31	CA	N9NA	480	24	20	AZ
KI5LKS	7,560	135	56	TX	KA6W	1,488	48	31	CA	AG7KO	408	24	17	WA
N5UM	6,968	134	52	OK	N6REK	1,377	51	27	CA	WA8ZNC	378	27	14	WA
N5DTT	6,664	119	56	TX	K6TLH	1,150	46	25	CA	K1LOK	336	24	14	UT
AL5P	6,240	130	48	TX	W6NKR	1,032	43	24	CA	W7MTL	325	25	13	OR
N6GQ	6,174	126	49	TX	KN6IUW	936	39	24	CA	KK7L	252	18	14	UT
NW5Q	6,000	120	50	TX	N6KT	900	36	25	CA	AF6WF	209	19	11	AZ
W5JEF	5,390	110	49	TX	AD6GE	884	34	26	CA	KF7GMV	170	17	10	ID
N5ZKF	5,246	122	43	TX	NZ6Q	748	34	22	CA	W0AUR	150	15	10	AZ
K5NZ	4,752	99	48	TX	AC6GO	731	43	17	CA	KJ7NBM	144	16	9	OR
W9LCQ	4,320	96	45	TX	W6ESL	714	34	21	CA	KG7WFO	117	13	9	WA
NC5G	4,134	78	53	TX	KG6MWI	690	30	23	CA	K7CJS	108	12	9	NV
K5MAY	4,080	102	40	TX	N6TTV (N6TVN)	648	36	18	CA	K7SYS	104	13	8	ID
*AA5KD	3,496	92	38	OK	K6OWS	612	34	18	CA	K7AEZ	49	7	7	AZ
KB5IXI	3,160	79	40	MS	K6CSL	595	35	17	CA	KK7A	42	7	6	ID
AC5EZ	3,150	90	35	TX	W1RH	558	31	18	CA	K7MSO	20	5	4	MT
WA5LXS	2,738	74	37	TX	W6JLV	504	24	21	CA	K6DGW	1	1	1	NV
W5JCC	2,520	72	35	TX	N5KO	468	26	18	CA	WT8P	0	0	0	WA
AA3C	2,442	74	33	TX	K6LRN	432	27	16	CA					
KE5ET	2,178	66	33	TX	WQ6X	416	32	13	CA	KW8N	134,113	833	161	OH
WJ9O	2,077	67	31	TX	N6LL	405	27	15	CA	N8II	74,844	594	126	WV
KM5JV	1,860	62	30	TX	K6MM	405	27	15	CA	W4KD	74,304	688	108	OH
NM5G	1,624	56	29	TX	W6APH	390	26	15	CA	N8CWU	55,500	500	111	OH
KI5GNH	1,537	53	29	TX	KQ6BN	390	26	15	CA	NA8V	45,474	429	106	MI
K0NM	1,316	47	28	TX	K6DWD	285	19	15	CA	N8BV	33,803	439	77	OH
KF5OMH	1,300	50	26	TX	W6AOY	240	20	12	CA	N8CJ	18,117	297	61	OH
KJ0DY	1,296	48	27	AR	K6ELE	210	15	14	CA	AB8OU	18,096	232	78	OH
K5AEB	1,288	56	23	OK	K6MI	187	17	11	CA	W8TB	17,775	225	79	OH
*KJ5MA	1,029	49	21	TX	NI6P	153	17	9	CA	KB8TYJ	16,320	255	64	MI
KF5VO	960	48	20	TX	AJ6RX	150	15	10	CA	K4YJ	14,168	184	77	OH
WE5TR	902	41	22	TX	K6BBQ	80	10	8	CA	W8WTS	13,923	221	63	OH
K5BG	720	40	18	TX	AG6AG	72	9	8	CA	KE8PX	11,529	183	63	OH
KD5J	468	26	18	AR	KO6LU	64	8	8	CA	K3DMG	8,555	145	59	OH
KR5N	338	26	13	TX	KF6NCX	63	9	7	CA	N8PE	7,849	167	47	OH
N5AJD	286	26	11	TX	K9JM	42	7	6	CA	K8BL	6,270	114	55	OH
K5GA	275	25	11	TX	W6RKC	40	8	5	CA	K8TS	5,715	127	45	MI
K5JPP	195	15	13	TX	K6ACV	36	6	6	CA	W8TOM	5,635	115	49	MI
KU5Y	144	16	9	TX	K6KM	24	6	4	CA	KA8NJW	5,618	106	53	WV
KC9BG	136	17	8	OK	W6RT	21	7	3	CA	W3CB	4,982	106	47	MI
KB5MPJ	126	18	7	TX	AE6PL	20	5	4	CA	NE8P	4,640	116	40	MI
N5WMQ	88	11	8	NM	K8TR	16	4	4	CA	W8KNO	4,004	91	44	OH
KI5JCN	84	14	6	TX	KI6ETL	8	4	2	CA	N8WCP	3,720	93	40	OH
KF5DPX	77	11	7	TX	W6JTI	4	2	2	CA	KM8AM	3,663	99	37	OH
AA5AH	70	10	7	TX	AB6RO	1	1	1	CA	KC8LA	3,337	71	47	OH
K5VOP	66	11	6	TX	N4DLA	1	1	1	CA	K8LL	3,280	80	41	OH
K5IX	40	8	5	TX	N3RC	1	1	1	CA	ND3N	2,900	100	29	OH
W5PR	35	7	5	TX						KE8E	2,775	75	37	OH
					ND7K (W4IX)	140,275	905	155	AZ	K8AJS	2,752	86	32	OH
N5ZO	145,855	941	155	CA	K2RD	137,250	1098	125	NV	N8SDR	2,656	83	32	OH
N6IE	99,630	810	123	CA	KA6BIM	44,505	387	115	OR	KW8KW	2,484	69	36	OH
WC6H	78,699	709	111	CA	N7GP	43,884	414	106	AZ	N8PPF	2,013	61	33	OH
NC6R	49,955	515	97	CA	K7QA	32,660	355	92	MT	KE8NBC	1,728	54	32	OH
W6TK	49,066	486	101	CA	KL7SB	31,996	421	76	KL7	WA8KAN	1,664	52	32	WV
AE6Y	45,360	432	105	CA	W0RIC	31,680	360	88	AZ	N8BZN	1,656	69	24	MI
K6GHA	44,833	419	107	CA	K7SS	23,821	287	83	WA	AC8WC	1,470	49	30	MI
K6RO	41,905	493	85	CA	W7ZZ	20,757	407	51	WA	KA8TOA	1,363	47	29	OH
WN6K	41,705	439	95	CA	N7NWL	17,775	237	75	AZ	N8AA	1,275	51	25	OH
WH7T	40,192	628	64	KH6	N7VS	14,413	203	71	OR	N8YX	1,254	57	22	OH
N6ZFO	38,582	382	101	CA	WB6JJJ	11,322	153	74	OR	K9NW	1,104	48	23	OH
W6DMW	31,284	316	99	CA	KD7HU	8,468	146	58	MT	WB8TCB	925	37	25	OH
KH6CJJ	25,477	349	73	KH6	AL2F	7,943	169	47	KL7	KE8PMV	630	35	18	MI
ND6O	25,350	338	75	CA	K9RZ	7,224	129	56	AZ	N8NFE	425	25	17	OH
N6OKU	25,200	504	50	CA	KE6K	7,192	124	58	AZ	K8NZ	345	23	15	OH
N6WM	21,978	297	74	CA	WY7M	6,156	108	57	WY	AB8SF	132	12	11	MI
W1SRD	19,812	254	78	CA	NG7M	5,520	138	40	UT	N8TW	110	11	10	MI
K7GK	19,024	232	82	CA	K7VAP	4,902	114	43	WA	KD8NZF	108	12	9	OH
AJ6V	15,164	223	68	CA	N7WY	4,329	111	39	WY	KB8HGW	80	10	8	OH
WA7BNM	9,960	166	60	CA	N7LR	3,864	84	46	AZ	N5MKY	70	10	7	MI
W6PZ (K6SRZ)	9,720	180	54	CA	KJ9C	3,504	73	48	MT	KE8FAE	48	8	6	OH
KE8FT	8,004	138	58	CA	N7RQ	3,432	104	33	AZ					
N6VOH	7,567	161	47	CA	WN6W	3,069	93	33	OR	K9CT	168,084	1044	161	IL
W6UE (N6AN)	7,164	199	36	CA	W7YTF	2,730	78	35	ID	WB9Z	136,512	948	144	IL
					W7PV	2,600	65	40	AZ	WT9U	96,691	727	133	IN

Call Sign	Score	QSOs	Mults	QTH	Call Sign	Score	QSOs	Mults	QTH	Call Sign	Score	QSOs	Mults	QTH
K9BGL	73,312	632	116	IL	W9SE	1,377	51	27	IL	NØMDC	2,701	73	37	MN
K9GX	63,498	557	114	IN	N9JR	1,352	52	26	WI	WØMAR	2,553	69	37	CO
W9QL	59,385	535	111	IL	K9EL	1,344	48	28	IL	KCØVDY	1,920	64	30	CO
W9RE	52,393	433	121	IN	N9SJ	1,311	57	23	IL	KDØWAN	1,860	60	31	MO
N7ZZ	51,714	507	102	WI	KD9ERS	1,118	43	26	IL	N2DEE	1,798	58	31	CO
W9AV	40,392	396	102	WI	AB9YC	1,104	46	24	IL	AFØZ	1,652	59	28	MN
WD9CIR	35,340	372	95	IL	N8HWV	1,066	41	26	WI	NØVRM	1,472	46	32	MN
KR9U	31,488	328	96	IN	KB9OZI	1,050	50	21	IN	N7SE	1,325	53	25	CO
KD9V	30,537	351	87	IN	KB9LGS	962	37	26	IN	NØYH	1,215	45	27	MO
W9YK	29,040	330	88	IL	KD9DZT	840	40	21	WI	KFØDPU	1,104	48	23	ND
W9ILY	26,187	301	87	IL	NN1N	756	36	21	IL	NØIRM	980	49	20	MO
AC9TO	24,795	285	87	WI	NA9VY	646	34	19	IN	NØBK	912	48	19	MN
AC9KW	21,845	257	85	IL	N9TO	640	32	20	IL	KBØKFH	874	46	19	KS
KD9GY	19,460	278	70	IL	KC9EE	629	37	17	IL	KØKPS	777	37	21	CO
WB8BZK	18,984	226	84	IL	KC9OYE	627	33	19	IN	AEØIB	768	32	24	MO
AJ9C	18,486	234	79	IN	KD9KEQ	510	30	17	WI	NDØJL	666	37	18	ND
W9XT	18,075	241	75	WI	KT9L	500	25	20	IN	WAØVPJ	630	30	21	MN
KYØQ	16,750	250	67	IL	AI9T	483	23	21	IL	NØWLX	608	32	19	NE
N9UPU	16,650	225	74	WI	N9UN	392	28	14	IN	W6GMT	442	34	13	MN
KC9K	16,284	236	69	IL	K9VQA	390	26	15	IL	KBØYH	435	29	15	CO
K9DUR	14,490	207	70	IN	KG9N	384	24	16	IL	KØMKL	364	26	14	MN
W9DZ	12,408	188	66	IN	WB9BWP	345	23	15	WI	KMØF	363	33	11	SD
N9EP	12,360	206	60	IL	KM9M	304	19	16	IL	KØEEM	60	10	6	IA
KK9V	11,968	176	68	IN	K9KM	240	16	15	IL	KJØP	56	8	7	MN
N5RP	11,526	226	51	IL	KC1KHH	180	18	10	WI	KFØADU	9	3	3	MN
N9WEW	11,102	182	61	IL	K9CV	100	10	10	IL					
W9POL	10,710	170	63	IL	AC9UV	98	14	7	IL	VE3PJ	94,848	741	128	ON
N9HQ	10,584	168	63	IL	N7MB	70	10	7	IL	VA3DF	74,844	567	132	ON
K2DRH	10,570	151	70	IL	*AF9J	16	4	4	WI	VE3MGY	56,175	525	107	ON
KG9X	10,530	162	65	IL	KK9N	6	3	2	IL	VE3YT	27,482	302	91	ON
N9DR	8,512	133	64	IN	AC9XL	1	1	1	IN	VE3TW	20,513	281	73	ON
N7US	8,496	144	59	IL						VE3KP	16,884	201	84	ON
K9WX	8,216	158	52	IN	KØEU	185,130	1210	153	CO	VE5KS	13,845	195	71	SK
WA9LEY	7,448	133	56	IL	ACØW	163,415	1015	161	MN	VA3ZNQ	12,988	191	68	ON
W9IZ	6,656	128	52	IN	KØAD	60,424	581	104	MN	VE4GKM	12,250	175	70	MB
K9LA	6,000	125	48	IN	WØAAE	58,176	606	96	MN	VE3HZ	8,216	158	52	ON
WT2P	5,875	125	47	IL	NØXT	51,039	477	107	MN	VE7CV	6,864	132	52	BC
W9WI	5,328	148	36	WI	K4IU	45,194	383	118	MN	VA3LR	6,750	150	45	ON
W9TC	5,252	101	52	IN	WØETT	43,365	413	105	CO	VE3RVZ	6,545	119	55	ON
N2BJ	5,236	119	44	IL	KØEA	41,850	450	93	MN	VA3PC	4,752	99	48	ON
WB9HFK	5,166	123	42	IL	KVØI	35,496	408	87	NE	VA3DKL	4,736	148	32	ON
W9FFA	5,106	111	46	IN	KØAIZ	33,100	331	100	NE	VA3IJK	4,687	109	43	ON
WO9G	4,876	106	46	IN	WAØI	25,938	262	99	MO	VA3AUW	3,300	100	33	ON
N9CO	4,620	110	42	IL	KAØPQW	21,156	258	82	MN	VE3TM	2,516	74	34	ON
N9LQ	4,520	113	40	IL	KØYR	14,991	263	57	MN	VA6RCN (VE3RCN)	2,278	67	34	AB
W9FY	4,046	119	34	IL	NGØC	14,652	198	74	MN	VA3PAF	1,624	56	29	ON
KC9EOQ	3,916	89	44	IL	WØHBH	13,000	200	65	MO	VE5GC	1,512	56	27	SK
NJ9Q	3,612	84	43	IL	NØAT	12,243	231	53	MN	VA3QB	1,325	53	25	ON
K9LC	3,560	89	40	IL	NØYO	10,270	158	65	KS	VA7EGZ	1,320	55	24	BC
K9PG	3,478	74	47	IL	NØTA	9,860	170	58	CO	VE7KPM	1,215	45	27	BC
K9MMS	3,472	112	31	IL	AAØCW	9,815	151	65	CO	VE5MX	1,053	39	27	SK
WA9PND	3,432	88	39	WI	K7BG	8,940	149	60	SD	VE2TSM	888	37	24	QC
NV9X	3,219	87	37	IL	WAØE	8,844	132	67	MO	*VE3KJQ	672	32	21	ON
N9TK	3,145	85	37	IL	WØABG	8,415	187	45	KS	VE9RLW	612	34	18	NB
NY1V	2,925	75	39	IN	KØM	8,122	131	62	IA	VA3WEB	576	32	18	ON
ND9G	2,880	72	40	IL	WBØN	7,749	123	63	MN	VE3LVW	420	30	14	ON
KC9AAP	2,835	81	35	IN	WØYJT	7,685	145	53	KS	VE2HEW	400	25	16	QC
NE9A	2,822	83	34	IL	KØJP	7,467	131	57	MN	VE3ERC (VA3KXS)	126	14	9	ON
*KD9NYE	2,812	74	38	IL	WØCOE	7,370	134	55	MN	VA3BCV	126	14	9	ON
NQ9A	2,660	70	38	WI	KN4FRG	6,517	133	49	MO	VE9WRS	84	12	7	NB
W9PI	2,380	70	34	IL	NDØTS	6,477	127	51	ND	VE7BLW	24	6	4	BC
N9RMB	2,345	67	35	IL	NRØP	5,151	101	51	KS	VA1RST	16	4	4	NS
N9JF	2,336	73	32	IL	KØOP	4,950	110	45	MN	*VE7BGP	4	2	2	BC
K9GA	2,175	75	29	IL	W8LYJ	4,368	91	48	CO					
WD8DSB	2,030	70	29	IN	NWØM	3,800	100	38	MO	KP4AA	110,922	798	139	KP4
W9VTD	2,015	65	31	IL	KI5PLT	3,784	86	44	ND	KP2RUM (K9VV)	22,360	260	86	KP2
N9VPV	2,006	59	34	IL	KØSRL	3,696	84	44	IA	HP1XT (K2GO)	1,161	43	27	HP
KD9LVR	1,537	53	29	WI	WØZA	3,552	96	37	CO	KP2OJ	714	51	14	KP2
KC9YL	1,470	49	30	WI	KDØRIY	3,420	90	38	NE					
AC9S	1,456	56	26	IL	NØLLH	3,182	74	43	KS	*QRP				
					NØVT	2,880	80	36	MO					

## Multi-Two Scores

Call Sign	Score	QSOs	Mults	QTH	Operators	Call Sign	Score	QSOs	Mults	QTH	Operators
WW4LL	270,930	1642	165	ME	W1MD, K4NV, NN3W, WW4LL	N2QT	1,377	51	27	VA	N2QT
NU5A	269,496	1620	171	TX	K5WA, KC5TT, W5KU, K5GN	WC7S	1,204	43	28	WY	WC7S
WX3B	239,200	1497	160	MD	N3FZ, WX3B, W3MMM, WA3AER, NY3A, N8IVN	WI7J	1,150	46	25	UT	WI7J
NX6T	232,290	1335	174	CA	N6K1, W6ZAR, K16RRN, W6JBR, WQ6X, N7NR, WM6Y	KI2D	1,150	46	25	NY	KI2D
KA4RRU	146,861	1027	143	VA	WA4PGM, K5OF, KA4RRU, W71Y, W4GO	KC3QVQ	1,148	41	28	MD	KC3QVQ
W3LL	106,586	778	137	MD	W3LL	W5IOH	1,040	40	26	TX	W5IOH
N5YA	104,140	820	127	TX	K15MHB, N5YA, K5KRK, K5QE	K5LGX	1,025	41	25	TX	K5LGX
N3QE	73,206	581	126	MD	N3QE	KB8ZR	1,008	42	24	OH	KB8ZR
W5WZ	72,267	663	109	LA	KI5OYN, W5WZ, WM5H	NA0ED	990	45	22	CO	NA0ED
K3AJ	69,776	623	112	MD	KB3IKC, K3AJ, K3WA, ND3D	KA5CRL	960	40	24	TX	KA5CRL
K3MTR	66,807	571	117	MD	K3MTR, N3DPB, KB3VQC, WA3EKL, WT3K, AC3HU	W4THI	936	36	26	FL	W4THI, W4DJL
K3CCR	55,056	496	111	MD	W5MPB, N3UM	K4LDC	840	35	24	GA	K4LDC
W9ARP	53,760	560	96	IN	K9YK, K9XN, N9YTB	KC5LL	805	35	23	TX	KC5LL
NY6DX	49,868	548	91	NY	NY6DX	KN4MIV	750	30	25	FL	KN4MIV
W4NF	49,288	488	101	VA	W4NF	K9AWM	720	30	24	IN	K9AWM
N3AD	48,177	477	101	PA	N3AD	KJ8O	703	37	19	CA	KJ8O
N1RM	36,668	356	103	VA	W2WCM, KO4RDF, KM4HZF, WA8AHZ, KO4RCG, N1RM, KO4QWB, K4EWR, WA3RGH	NU4N	693	33	21	KY	NU4N
WA5SOG	35,972	391	92	AR	WA5SOG	WO2Y	672	32	21	NJ	WO2Y
VA3WW	26,070	330	79	ON	VA3WW	W9ZK	640	40	16	IL	W9ZK
K3AU	23,166	286	81	MD	K2YWE	NN0JS	589	31	19	MO	NN0JS
KG4W	20,066	254	79	VA	KG4W	KB2URI	567	27	21	NY	KB2URI
W3MAM	18,873	233	81	MD	W3MAM	N1ERS	544	34	16	MA	N1ERS
W3MLJ	16,335	363	45	MA	W3MLJ, KC1KUG	KM4JA	532	28	19	AL	KM4JA
W5KS	15,400	275	56	OK	W5LJT, KJ7EZO, KE5GS, K15HMM, KG5GCD, K5WIX, KC5CYY, KG5YTR, N7DOD, WA5DE	W4CMG	500	25	20	TN	W4CMG
N3JT	14,880	186	80	VA	N3JT	N1SOH	440	22	20	MA	N1SOH, W1FM
W3UL	14,784	231	64	MD	W3UL	W9NXM	425	25	17	IL	W9NXM
W2NPT	14,080	220	64	NJ	K2KCC, KD2KLN, KC2G, W2DLT	K7JKM	364	28	13	OR	K7JKM
N3HEE	13,396	197	68	SC	N3HEE	KD9OIN	360	30	12	IL	KD9OIN
N3MN	12,506	169	74	VA	N3MN	KD2KEH	352	22	16	NY	KD2KEH
N5KB	12,155	187	65	IA	N5KB	KG5KRZ	330	22	15	LA	KG5KRZ
K5VIP	11,072	173	64	VA	K5VIP	W5KAL	320	20	16	TX	W5KAL
W8AJT	10,292	166	62	OH	KE8VU, KD8RLA, N8KYX	W9NZ	312	26	12	IL	W9NZ
KK4ADQ	10,230	165	62	VA	KK4ADQ	K4IDT	300	20	15	KY	K4IDT
K3TD	10,140	169	60	NC	K4QPL, K3TD	N6GWH	276	23	12	CA	N6GWH
VE3KTB	9,480	158	60	ON	VE3KTB, VA3LML	KT4O	220	20	11	TN	KT4O
K8LX	8,142	138	59	MI	K8LX	K4KPD	216	18	12	GA	K4KPD
W1SRG	7,722	143	54	MA	KC1ITY, AG1C, W1OMG, K1MT	VA3AMX	187	17	11	ON	VA3AMX
NY3B	7,008	146	48	PA	NY3B	KD9QHJ	169	13	13	WI	KD9QHJ
K1BZ	6,726	118	57	MD	K1BZ	KD2SGM	160	16	10	NJ	KD2SGM
KB3HF	6,519	123	53	MO	KB3HF	K8PHP	132	12	11	OH	K8PHP
K1RH	5,760	144	40	MD	K1RH	W6ZZZ	130	13	10	CA	K6EI, W6ESL
AD8J	5,371	131	41	NC	AD8J	W2TI	120	12	10	NY	W2TI
K5XS	4,876	106	46	AR	K5XS	AE9LL	108	12	9	IN	AE9LL
VE9WH	4,646	101	46	NB	VE9WH	K9MCK	56	8	7	IL	K9MCK
KK4ODQ	4,410	126	35	VA	KK4ODQ, KK4ODR	K4WWP	42	7	6	VA	K4WWP
N4TL	4,275	95	45	NC	N4TL	K15MPX	24	6	4	TX	K15MPX
W7OM	4,268	97	44	WA	W7OM	KC1ELF	24	6	4	MA	KC1ELF
W3CRZ	4,176	87	48	OH	W3CRZ	WA7YXY	21	7	3	OR	WA7YXY
WA1ZYX	4,059	99	41	NH	WA1ZYX	N9AUP	20	5	4	IL	N9AUP
K3EW	3,906	93	42	MD	K3EW	NG2G	16	4	4	WA	NG2G
KX4AV	3,520	80	44	KY	KX4AV						
VA3WPJ	3,403	83	41	ON	VA3WPJ						
KM4IAJ	3,344	76	44	VA	KM4IAJ						
AC4MG	3,339	63	53	GA	AC4MG						
K4ELI	3,268	86	38	GA	K4ELI						
AK3B	3,237	83	39	MD	AK3B						
K4FTO	2,960	74	40	VA	K4FTO						
NN2T	2,940	84	35	FL	NN2T						
W3TAS	2,664	74	36	DE	W3TAS						
AA0AI	2,592	81	32	IA	AA0AI						
KA9GDW	2,412	67	36	IN	KA9GDW						
W8EDU	2,409	73	33	OH	KE8QFY, AD8Y						
K5BYN	2,400	75	32	OK	K5BYN						
KC2WUF	2,310	70	33	NJ	KC2WUF						
K6TQ	2,240	70	32	CA	K6TQ						
K00O	2,112	66	32	MD	WA3OFF, K00O, W3RFC						
N3DRL	2,100	60	35	PA	N3DRL						
VE3FZ	1,984	64	31	ON	VE3FZ						
N6OOA	1,960	70	28	CA	AE6J, K6JRO, NK6M						
AA0FO	1,830	61	30	KS	AA0FO						
N9AJD	1,830	61	30	IN	N9AJD						
W4KW	1,775	71	25	TN	W4KW						
VA7USD	1,624	58	28	BC	VA7USD						
K3JSJ	1,534	59	26	MD	K3JSJ						
KY4BN	1,457	47	31	GA	KY4BN						

**Check Logs:** AD2BO, AI9K, HA1DAE, K0ZR, K2ACX, K2AF, K5KMS, K5PAR, K5TIA, K5WSW, K6MR, K7UT, K7ZS, KB7PKC, KC3NNO, KD2SXD, KZ3P, N4OI, N4ZR, N8QNT, N9JPG, NR3X, W1BBU, W1IE, W2ARP, W3AZT, W5JWP, W6KC, W6XU, WA2VIU, WC8VOA, WS7X