## Results, 1978 September VHF Contest

From the "fabled Northeast" to Pike's Peak to Guam, mediocre conditions couldn't stop the enthusiasm this year.

By Tom Frenaye,\* K1KI

o hum! Another September VHF Contest is over. Was it as dull as usual? Well, not quite. The usual complaints about September conditions were there, and in greater numbers since the increasing sunspot levels were supposed to help out on 6 meters at least. And, the usual numbers records were broken.

So, where was the action? The recent single-operator king of the West Coast (N6NB) decided to do battle from the Northeast and nearly pulled off another top score. Last year's top multioperator group (W2SZ) was cooked by the microwave equipment from W1FC. Some very interesting DX entries even came through and the intense competition this year produced more than a normal level of complaints.

First, some of the numbers. A total of 338 entries was received, not much different from the total last year. Thirteen new division records were set, up from last year's 10. Both multioperator and single-operator records were set in the Atlantic, Dakota and Southwestern Divisions. Three records from before 1970 were topped. The 14-year-old multiop record of WØDK/Ø from the Rocky Mountain Division was more than doubled by the NØKV group from the top of Pike's Peak, and the 1966 Midwest Division multiop record set by the WØLB group was almost

tripled by KØTLM and crew. Eastern Pennsylvania provided the new Atlantic Division single-operator record score of WA3AXV, which topped K3IPM's 1969 effort. The contest family at K5CM more than tripled the old West Gulf Division multioperator record.

Average scores were well up over last year. The smallest score in the top ten single-operator listings is more than 9000 points higher, and the number 10 multioperator score is more than 17,000 points above the 1977 scores. This seems to accurately display the growth in vhf/uhf activity especially on 430 and 1215 MHz reported by many participants.

A look at the top ten scores nationwide shows nothing but W1s, W2s and W3s making it in the single-operator category, while the W4BFB/4 group and W8VP managed to invade the multioperator top ten list. Those west of Ohio are hurt by the lack of numbers and sections to be worked.

A listing of the top five scores west of the Mississippi should give some recognition to those a bit handicapped: Single operator — W6YKM, N6TX, W6XJ, N6CT, WB6NMT; Multioperator — WB6KBZ, K6KLY/6, K5CM, WA6EJO, K6MEP. Of course, those in Wyoming or New Mexico probably will always have to be satisfied in other ways.

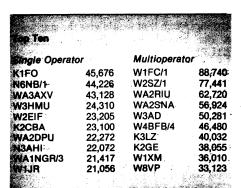
The big multioperator battle was between W2SZ/1 and W1FC this year. The W1FC mob showed the group from RPI

that just having gear from 50 to 1215 MHz isn't enough anymore. Couple that with a hefty edge in 2-meter contacts and the W2SZ multiplier total just didn't make it. The WA2RIU-WA2SNA battle for third was close but RIU's edge in contacts made up for SNA's edge in multipliers.

The single-operator battle between K1FO and N6NB/1 was a classic. Put together K1FO's years of experience from his New England lowland QTH and N6NB's Vermont mountaintop location and West Coast contesting background and the stage was set for a rough battle. Add to that lost luggage, 4-1/2 hours of lost operating time, freezing temperatures in Vermont and the cozy, familiar operating position in Connecticut, and K1FO was smiling. The difference was the 220/430-MHz contacts for the most part. N6NB is making no excuses, however, and is planning to have at it again from the "fabled Northeast."

The lack of lengthy 6-meter openings in the continental U.S. didn't seem to discourage KG6JIH (N6AJ). From his Guam QTH he managed a staggering 358 6-meter QSOs, including such catches as Hong Kong, Australia, and Papua New Guinea in addition to 348 contacts with Japan. Not too bad when you consider Japan is 1450 miles away! The log from PAØXMA showed 96 European contacts and eight multipliers but the contest rules say those outside of the ARRL sections can only count QSOs with stations in

\*Asst. Communications Manager, ARRL



WB4CHZ (left) and WB4OUT, doing a little 6-meter action at 3 A.M. on Sunday. George and Dave were with the WB4LHD/5 multiop expedition to Arkansas.





WA3AXV, the number 3 single operator in the 1978 September VHF QSO Party.

Single Operator		Multioperator		
Call	Score	Division	Call	Score
*WA3AXV	43,128	Atlantic	*W3AD	50,281
*K9KFR	20,351	Central	W9NWE	26,910
*KØCJ	1,392	Dakota	-+KØVXM:	6,222
*WB4JGG	.9,456	Delta	WB4LHD/5	5,022
WA8OGS	9,560	Great Lakes	W8VP	33,123
K2CBA	23,100	Hudson	WA2RIU	62,720
WBØZXU	3,456	Midwest	*KØTLM	3,799
*K1FO	45,676	New England	W1FC/1	88,740
WA7KYZ	1,649	Northwestern	K7MM/7	155
W6YKM	12,635	Pacific	*WB6KBZ/6	31,995
WA2FGK/8	8,077	Roanoke	W4BFB/4	46,480
WA7KYM	308	Rocky Mtn	*NØKV	2,325
*WA4FBH	5,670	Southeastern	*W4VO	15,121
W6XJ	6,335	Southwestern	WA6EJO	9,900
WB5WJT	806	West Gulf	*K5CM	18,630
VE3BQN	12,054	Canadian	VE3AEA/3	2,373
JE1HYR	1	DX	K4GFG/C6	124

ARRL sections, thus his score of zero with eight multipliers. Any enthusiasm out there for a rule change?

Now for the problems. More than the normal number of complaints were received this year, and warnings have gone out to a few. The most abused rule seems to be the one transmitter per band rule, with several stations claiming to have heard others on both 2-meter fm and ssb at the same time. A few single-operator stations were noted transmitting on more than one band at once — another no-no. The fm versus no-fm debate still appears to be raging, but the compromise four-hour limit on .52 and limited simplex frequencies seem to be the best solution for the time being.

A number of complaints also pointed to stations not using portable i-ds. If you are out of the call area your call sign indicates, you must sign portable (K1KI portable in ENY must sign K1KI/2 but when portable in VT, just K1KI is sufficient).

Another problem that gives fits to those checking the logs is the multioperator station that works every operator at the station on 2 meters or works one of its members on 10 GHz in the next state. Is it fair to count QSOs with your own operators? Some logs show a 15-20 QSO or several multiplier increase in the score. What say on this one? Comments appreciated.

While on the subject of problems, logging and the associated paperwork with submitting a valid vhf contest entry come to mind very quickly. A few tips to help overcome this obstacle are in order: First, log contacts in *UTC*, not local time. Makes it easier on us and easier when going back in your own log for QSLing purposes. Next, duplicate contacts left in the log are a surefire way to some heavy-duty score reduction. Remember, you can only work a station *once* per band, regardless of mode used. And finally, in logging the contact for contest purposes, be sure to

supply all the needed information for each and every contact: date, time (in UTC), freq./band, call sign of station worked, and the *complete* exchange required for a valid contest contact. The paperwork might be a drag, but a top-notch contest score very rarely results from a sloppy, incomplete entry.

That about puts the wraps on another September VHF QSO Party report. If you liked it, tell us so. If you didn't like it, let us know that, too. We are always looking for ways to improve our reporting, but we don't know if you don't tell us.

CU in the January VHF SS.

## Soapbox

Steve and I planned to operate from Mt. Equinox in Vermont. Neither Steve nor I had ever operated in a contest before

and we thought that Vermont would be a needed state for the fellows in the NY-NJ metro area. Boy, were we surprised. After driving for over four hours from NJ, we climbed Mt. Equinox and spotted a 2-meter beam above the motel on the top of the mountain. We later learned that K1BF, Bart, was also going to operate in the contest from the mountain. Bart. Steve and I (WB2CZB) agreed that one station would be operated near 144 MHz and the other station would be operated higher up, about 144.200 MHz or so to minimize QRM. It looked as though we could work it out. Just before the contest started, N6NB, Wayne, arrived atop the mountain, all the way from California. Could three stations operate the contest, separated by only several thousand yards? You bet we did. Bart operated mostly cw

The number 1 single operator from the Western Pennsylvania Section, WA3CPH.



Multiopera	40-								
munnopera	tor.								
50 MHz		144 MHz		220 MHz		430 MHz		1215 MHz	. (%)
W2SZ/1	258	W4BFB/4	556	WA2RIU	144	W2SZ/1	101	WB6KBZ	14
W3AD	256	W1FC	532	K6KLY/6	90	WA2FUZ	69	W1XM	13
WA1LUJ	240	K6KLY/6	356	WB6KBZ	82	K2GE	64	W1FC	13
W1FC	212	WB6KBZ	351	K6MEP	75	W1XM	62	WA2RIU,	11
WA2SNA	201	K2GE	347	K3LZ	67	WA2SNA	60	K6KLY/6	10
Single Ope	rator								
KG6JIH	358	WB2WIK	467	W6NXB	51	K2RIW	94	N6TX	17
N6NB/1	196	K9KFR	273	WA3AXV	51	K2UYH	92	K2UYH	16
WA8OGS	178	K1FO	266	WB6FTW	49	K8WW	72	W1JR	10
K2CBA	156	W9IP	237	W2EIF	46	K1FO	.70	WA3JUF	9
W9OEH	141	VE3BQN	233	W3HMU	40	WA3AXV	69	WA6GYD	9
								W6XN	9

at the low end of 2. Steve and I operated ssb above 144.150. And Wayne operated the other bands as much as possible, using 2 when our station was off the air. We were all able to operate with a minimum of QRM to each other. (WB2CZB/1) We checked 6 meters constantly. Even took the rig to the beach with us, but no Es. Very disappointing! (K4GFG/C6) Activity on 6 meters for the contest seemed rather low. Scatter conditions were excellent from this area, supplying many needed multipliers. (WB8IWI/4) Until this contest, I have pretty well had the band to myself here in Ottawa. But, VE3ASO moved to town just before the contest and now talk about QRM! I can appreciate what it must be like in the NLI-NJ-EPA area. (VE3FN) Very disappointed in conditions. Two meters produced beautiful contacts into the NYC area. When will the 6-meter boys smarten up and leave 50.1-50.125 for cw operations? Tremendous signals on 432 from VE3-land. 220 MHz stunk. (WA2FGK/8) It may sound a little bit weird, but would like to see "altitude kilowatts" appropriately handicapped. A system similar to the one used by the FCC to figure repeater output power would work just fine. I would not propose to regulate erp based on altitude, but only to regulate input power, so as not to penalize an ingenious antenna system. TGFTOFTT means Thank God For Tropo On Four Thirty-Two. (KB4BT) Getting the score that we had is all the more remarkable considering that the site was shut down for a few hours because of tornado warnings. However, as soon as the winds died down, the crew remanned the site rather than shutting down permanently. No Delaware Section again. I make a motion that if we don't work them next time, that Delaware be canceled for lack of interest. (W3GNR) These signal reports on ssb are guesses only. I think we should drop the "S" meter readings in these contests and use only "Q" readability. (K9ZNK/8) Can't ever remember working so many Vermont stations as in this contest. (K1FO) Finally made my goal of 50 QSOs on 432. (W1JR) While our lowly 16 points may sound like we weren't trying, my wife, WB7OSC and I have concluded that working a vhf contest from a rural area, away from major populated areas, is just about hopeless. We were somewhat limited in that we only had 2-meter fm, but we did borrow an amplifier. It might be interesting to note that we worked only one active contest station (W7DG) and all seven others were just passing by the frequency or dragged away from the re-

peaters. I called and called until I was blue in the face, but nobody answered those calls. We also left the rig on 146.55 all night, while we slept, but nothing was heard. See, I told you it's dead around here on vhf! (WA7PTM) After operating 6, 2 and 220 during vhf contests from southern Ontario, it was sure different up here in northern Ontario. Every contact had to be earned. I was disappointed with the number of sections worked, but pleasantly surprised by the number of stations worked, helped a great deal by the fm activity from Sault Ste. Marie, some 160 km (100 miles) away. Highlight of the contest was a successful sked with KØMQS in Delta, IA, 957 km (595 miles). I've worked him three times in as many weeks, but there was no inversion this time. (VE3EMS) I always thought 432 MHz was a hard band to get on and even harder to make a contact on. With the help of W2AZL, WA2DPU and WB2IFC, I was able to get on 432 for the contest with a borrowed rig. What a surprise, I worked 10 states and 12 sections in the contest. Best DX was W1FC in New Hampshire about 250 miles away. (WB4NXY/2) Many violations of the rule requiring "no transmitting of two modes on the same band at the same time" were noted. (WB2RJL) WA4GPM, watch out - next June, I'm going to be number 1 in Virginia. (N4CD) Never turned on the 5894 amplifier and still snagged 13 sections on 3 watts of cw on 144 MHz. (WA2ANZ) Generally a poor contest. . . . Just like last year. The whole contest period sounded like an extended version of the Sunday morning tropo sessions that we used to have from Wisconsin to pick up those East Coast sections. Lots of tantalizing signals, but nothing lasting long enough to work, save a few very short openings. (WØRIB)

## Update

The log from VE2DFO was delayed due to Canadian postal problems: 11,001-178-57-ABD.

	tor								
50 MHz		144 MHz		220 MHz		430 MHz		1215 MHz	
W9NWE	31	W3GNR/3	23	W2SZ/1	17	W2SZ/1	21	W2SZ/1	7
W3AD	30	W2SZ/1	23	K3LZ	14	WA2FUZ	19	W1FC	7
WA1LUJ	28	W3AD	22	WA2SNA	13	K2BWR	19	W1XM	6
W8CCI	28	VE2DFO	22	WA2RIU	13	WA2SNA	18	WB6KBZ	4
K5CM	27	W2OW	21	W1FC/1	11	K3LZ	16	K6KLY/6	4
		K3LZ	21	W3AD	11				
Single Ope	erator								
WB8IWI/4	34	WB2WIK	23	N6NB/1	13	K2RIW	21	K2UYH	9
WA8OGS	31	W2AV	23	K1FO	12	K2UYH	21	WA3JUF	7
WA4FBH	31	N6NB/1	22	W3HMU	11	W3OZ	20	K2CBA	6
WB4JGG	30	K1FO	22	WA3AXV	11	K2LGJ	19	K1FO	6
W9OEH	30	VE3FN	21	W3GPY	11	K8WW	18	W1JR	6
		VE3UH	21			W3HMU	18		

If there was a competition for the best scenery in the September vhf bash, WB4KGY operating the multiop station, K4GFG/C6, would have won, palms down.



Scores are listed in order, single-operator stations first within each section. From left to right: call, score, number of QSOs, number of multipliers, bands operated (A-50 MHz, B-144 MHz, C-220 MHz, D-430 MHz, E-1215 MHz, F-2304 MHz, G-3300 MHz, H-5 GHz, I-10 GHz).

U.S.A.	Northern New Jersey WB2WIK 10,741-467-23-B	4	Orange WA 6PMX 1664-128-13-AB	W9IVI 1190- 70-17-AB W9ABA 1062-118- 9-B WB9SNR 860- 43-10-D
1	WB2WIK 10,741-467-23-B WB2WIH 4760-170-28-AB WB2CUT 3971-209-19-B WB2NCF 3015-201-15-B	Alabama WA4NPL 1760- 80-22-AB WA4CQG 975- 53-15-BD KA4AOK(+KA4CFZ) 112- 14- 8-AB	WB6MFW 198- 22- 9-AB Santa Barbara	K9BQL 329- 47- 7-B W9MTS 132- 22- 6-D
Connecticut	WB2IZC 2205-147-15-B W2AQT 1216-64-19-B WB2TFH 680-40-17-AB WB2CHE 660-55-12-B	KA4AOK(+KA4CFZ) 112- 14- 8-AB Georgia	W6HDO 792- 26- 8-BD WA6EJO(+W6OAL,WB6IMM, WB9KMO) 9900-219-33-ABCDE	WÄ9ÄHZ 88-22-4-B W9NWE(+K9CT, N9SS, WB9YUN) 26,910-371-65-ABCD W9IP(+K9s AKS PW VV)
K1FO 45,676-483-76-ABCDE K1EM 6758-218-31-AB K1TX 5264-159-28-BCD WA1ZNT 4588-148-31-AB	WA2RIU(+K2KJI,WB2YEY) 62,720-680-70-ABCDEI WA2SNA(K2BJG,N2AAZ,W2IHM, WA2UPK,WB2s ARS JCP JUO LBP	WA4FBH 5670-135-42-AB N4QH 1410- 93-15-AB	W6HDO /92- 26- 8-BD WA6EJO(+W6OAL,WB6IMM, WB9KMO) 9900-219-33-ABCDE K6MEP(+K6VMN,WA6s FPX IJZ, WB6EDA) 8096-285-22-ABCD K6HXW(+WA6WTH) 5632-146-32-ABCD	W9IP(+K95 AKS PW VV) 14,520-330-44-AB W9ZX(+WB95 SKB VDV) 2958-102-29-AB
W9KDR/1 3906-115-31-ABD WAICVN 2525-101-25-AB K1ZZ 1530-83-18-BC KA1BU 1120-80-14-B	WAZUPK, WB2s A RS JCP JUO LBP LHG QEA QOQ, oprs) 56,924-636-76-ABCDE K2GE(K2s FD KFE KZ MS YSR ZGF, KAZAY V, NZAAR, W2s JDH	WA4FBH 5670.135-42-AB N4QH 1410-93-15-AB N4UZ 60-20-3-AB AK47 40-20-2-B W4VO(K4CKS,WA4KPU,WB4S AEG REX YWK,opts) 15;121-25-48-ABCD	Santa Clara Valley	Indiana  K9KFR 20,351-398-47-ABD  W9OEH 12,584-286-44-AB  WA9PKL 4154-134-31-AB
W1WHL 1104- 69-16-A W1JA 1014- 78-13-B	TGA WR2s BUR DR Z MSG NXK	15,121-295-48-ABCD WD4IIS(+WB4NMA) 6690-210-30-ABD	N6TX 10,980-206-36-ABCDEFHI WA6GYD 3960-142-22-ABCDE W6XN 3610-121-19-BCDE	
W1FAJ 585- 37-13-BC	ONA PLU SNN UYX,K9ZBV,oprs) 38,055-557-59-ABCD	Kentucky WA4IPI 5510-145-29-BCD WB4PUV 4200-210-20-AB	K6SLQ(K6MO,opr) 150- 17- 6-BCD WB6KBZ(+K6GSS,WA6s HCI TJO) 31,995-561-45-ABCDEF	WB9LCN 1781-137-13-B WB9FNR 423- 43- 9-BD W9ERW 140- 20- 7-B K9SLQ(+K9MRI)
WAIUBD 363-33-11-B WAILOU 207-23-9-B WBIFAU 161-18-7-BD	Southern New Jersey  W2E1F 23,205-257-65-ABCDE WA2DPU 22,272-322-58-ABCD	W4SMU 1020- 99-10-BD North Carolina	San Diego	7770-236-30-ABD K91U(WA2s BIJ ECZ,W3EP,WB9s BEH VVV,oprs) 2565-135-19-AB
WAILUJ(KIZKR,WAIs HYN LMZ RLV,oprs) 27,144-458-58-ABCD	WA2KOK 11,270-204-46-ABCD WB4NXY/2 10,350-197-46-ABD	WA4GBE 832- 45-16-ABC W4BFB/4(AA4s SC ZZ,AI4A,K4s BF LVV SE SLC,N4AFY,WA4VCC, WB4s FDU NDB PCS TLX,WD4s	W6XJ 6335-172-35-ABD WB6NMT 4864-127-32-ABCD WB6FTW/6 3840-191-16-ABC	Wisconsin WA9JFM 1595-145-11-B
Eastern Massachusetts W1JR 21,056-237-64-ABCDEF W1GXT 5728-132-32-BCD	K2UYH 7080-108-30-DE W3CXU/2 6200-108-40-ABCDE W2PAU 5740-164-35-ABC	WB4s FDU NDB PC5 TLX,WD4s ABZ LMM ODM,oprs) oprs) 46,480-776-56-ABCD KB4BT(+N4s SM YN,WD4s AAY	San Francisco N6CT 5903-207-26-ABD	WA9JFM 1595.145.11.B K9XY 897-56-13-ABD WA9SNU 832-57-13-BCD N9TD 315-35-9-B WA9SUJ 154-22-7-AB
W1JR 21,056-237-64-ABCDEF W1GXT 5728-132-32-BCD K1GVM 4805-135-31-ABD W1CRL 1848-67-24-ABD WB1FKF 1751-89-13-BD WB1FKF 1751-89-13-BD WBHCD 351-39-4-BE	WB2YEH 4440-134-30-ABC W2HXF 532-48-14-B K2BWR(+K2ZRJ) 18 147-200-59-ABCD	MCH) 6200-178-31-ABCD W4GG/4(W4s ACY AKU ANM MR, WA4MYQ,oprs) 1092- 71-13-ABC	San Joaquin Valley W6YKM 12,635-301-35-ABCDE WA6ALA 490- 49-10-B	Ø
WBIFOR 1140- 60-19-AB KIMHC 351- 39- 9-B WIJOT 124- 16- 4-BDE WBIFOK 108- 15- 6-BD	18,147-200-69-ABCD WA2DKB(+WB2s JGQ MIC VWW) 7320-156-41-ABD	1092- 71-13-ABC WA4WZQ/4(+K4YBC,WA4WZP, WB4s HIE UDS,WD4s GQU HBU) 980- 28-28-ABCD	W6DPD 120-10-10-ABC N6PR 102-17-6-B N7EU/6(+KB6DK,WA6s OEF RAK, WB6QYM,WD6GVZ)	Colorado WB@TTW/@ 249-83-3-B
WIJOT 124-16-4-BDE WB1FOK 108-15-6-BD W1XM(K1MK,N1RC,W1XG, WB1CQR,WA4TTG,oprs) 36,010-443-65-ABCDE	Western New York K2YCO 8924-158-46-ABCDE W2AV 3059-133-23-B	Northern Florida	759- 69-11-AB Guam	WBØTTW/Ø 249- 83- 3-B WBØYSJ/Ø 198- 66- 3-B NØKV(+WAGGFS,NØBZ,WØMBZ) 2325-150-15-ABD
Maine K1TOL 3380-130-26-A	K2LGJ 2356- 62-19-D K2EVJ 1794- 56-23-ADE WA2BPE 1404- 78-18-AB	WA4LYS 448- 56- 8-8 W4NVV 440- 40-11-AB W4CSS 372- 26-12-ABD W4EQR 315- 28- 9-BD	KG6JIH 2154-359- 6-AB Hawaii	Iowa WBØZXU 3456-133-24-ABD
WB1AAF/1(+K110,WA2NKL) 3450-125-23-BD K1CZ(+K1TMJ,KA1BFK, WA1JAS) 1260- 63-20-AB		South Carolina WB8IWI/4 4046-119-34-A K4GMJ 750- 50-15-AB	KH6BZF 1- 1- 1-B	WBØZXU 3456-133-24-ABD KØDAS 2014- 88-19-BD WBØVYV 1598- 94-17-AB WØRAP 1458- 66-18-BD WØXF 1248- 71-16-BD
New Hampshire	K2TTI 671- 58-11-BD K2OEQ 560- 53-10-ABD WA2MQP 116- 58- 2-B	WB4FEV 500-50-10-AB WB4NBK 200-25-8-AB N4JK(+W4FVV WA4JWC, WB4JWR,WD4BUH)	7 Arizona	KÓCY 572- 48-11-BD WAØTAQ(+WØMJP,WBØBUO, WDØAQP) 385- 35-11-AB
W1EJ 15,174-228-54-ABCDE WA1FSZ 10,481-193-47-ABCDE AC1J 4216-122-31-ABD	WA2AWX 750- 50-15-AB W2WGL 720- 45-16-B K2TTI 671- 58-11-BD K2TTI 671- 58-11-BD W2WMQA 21-16- 58-2-B W2WMQA 21-16- 58-2-B W2X-16- 58-2-B W2X-	WB4JWR,WD4BUH) 1008- 88-16-AB Southern Florida	WB8PBC/7 1- 1- 1-B	Kansas NØLL 480- 32-15-AB
WIFC(+WIs CF KXL LMZ IBX DUW DVC,KIs KA KEC RX EA VR JZS PQO PEK LL GW,	WB2RJL(+WA2KGM,WB2s IEY KIW) 11,400-286-38-ABD WA2ZJF(K2RKW,KA2s AJV	WB8IGY/4 360- 30-12-AB Tennessee	KB7AQ/7 216- 24- 9-AB K7MM(+KA7AGR,WB7s RNW WBZ WIA) 155- 31- 5-AB	WØRT(+KØOBY) 108- 18- 6-B Minnesota
AC1J 4216-122-31-ABD W1JSM. 520-40-13-8 W1FC6-W1.5 FKXL LMZ BX DTFLOR SEARCH LGW. WA1s ZSF ZPA FSZ ZTC AMU, N1s AAP BC) WB1CAG(K1ZJ), WA1S UH, WB1s FGV FGW,OP(s) 442-34-13-AB	MYY MYZ MMA,oprs) 9760-230-40-ABD WA2ZKD(+W2s AV HYI,WA2s	WB4JGG 9456-185-48-ABD Virginia	Montana WB7CLS/7 10- 10- 1-B	KOCJ 1392- 72-16-ABD WORLI 1284-107-12-AB
	WA2ZKD(+W2s AV HY),WA2s EWU VCM,WB2s FKY KAO, WB8KVT) 7378-198-34-ABCD W2DUC/2(+N2AFR,WB2DPT) 2982-142-21-AB	N4CD 5850-189-30-ABCD WD4MUO 5016-216-22-BD WA4GPM 4698-124-29-BD K4LHB 3588-120-26-BC	Nevada N7AKB(+K7ICW) 684- 56-12-ABD	WDØEKL(+WBØSYL,WDØFFA) 1144-104-11-AB Missouri
Rhode Island WA4MMP/1 3190-110-29-AB	3	K4LHB 3588-120-26-BC W4DFK 3465-165-21-B WA4SBC 3025-95-25-ABD W31Y/4 2160-108-20-AB	Oregon	WBØUFQ 1944-101-18-AB KØTLM(+WAØWPJ,WBØDRJ) 3799-114-29-ABCDE
W1BAT(K8BGZ,opr) 2210-130-17-B WA1PBR 1702-37-37-ABC WA1CSO 1665-111-15-B	Delaware  K3SXA 5220-139-29-ABCD  W3BDP 1456- 91-15-B	K4JSI 1032- 86-12-B W4MHQ 988- 57-13-ABD K4F IW 616- 44-14-AB	W7TYR 540- 49- 9-ABCDE K7HSJ 432- 40- 8-ABCD N7DB 144- 13- 8-ABCD WB7OSC(+WA7PTM) 16- 8- 2-B	WBØRJR(+WBØGLT) 420- 35-12-AB
W10H(+K1GNW,KA1BT) 4292-148-29-AB	AC3T 114- 12- 6-BC W3CGV 100- 10- 5-D	WBZJAY/4 60- 10- 3-C K4EJQ(+AA4OO,W4ATC,WA4s BGS CBX DFS KMG OFP QYK, WD4s AGO MBK,oprs)	Washington	WARIWF 1620-114-12-ABCI KOUS 405- 45- 9-B
Vermont N6NB/1 44,226-454-81-ABCDE K1LPS/1 4644-101-36-ABD	Eastern Pennsylvania WA 3AXV 43,128-479-72-ABCD	WD4s AGO MBK,oprs) 13,332-275-44-ABCD K3ZJ/4(+WD4s OQW RBZ) 1615- 95-17-AB	WA7KYZ(K7BBO.opr) 1649- 84-17-ABCDE K7ND 957- 67-11-ABCD W7IDZ 138- 23- 6-AB	WAGMRH(+WGEKB) 1800- 90-20-AB North Dakota
W1AIM 4212-105-36-ABD K1GYT 810- 27-15-AB W1EXZ 160- 20- 8-A WB2CZB/1(+WB2ZJH)	W3AAV 43,128.479-72.ABCD W3HMU 24,310.268-65.ABCDE W3AHI 22,072.317-62.ABCD W3AYIU 5365.187.62.ABCD W3AYIU 5365.51.529.ABC WB2RBG/34224.132.32.AB W3IT 3484.109.26.ABC	5 Arkansas	Wyoming	WØRIB(+WBØs QVC TEE UOR YJG) 112- 16- 7-AB
K1COW/1(+WB1DRW)		WB5JAR 444- 37-12-AB WA2QVI/5 270- 30- 9-AB WB4LHD/5(+WB45 CHZ NWE OVT, WD4JHD,WA5s BHS UMP)	WA7KYM 308- 28-11-AB	South Dakota KØVXM(+WBØTEM)
WB1FPT(+WB1s BZR CNE) 550- 46-11-BD	W3CLQ 2755-145-19-B W3ETB 1785-113-25-ABC	WD4JHD,WA5s BHS UMP) 5022-154-31-ABD N5DL(+WD5s CAN CAP CLR,	Michigan WB8BGY 9146-255-34-ABD	6222-166-34-ABD
Western Massachusetts  K1JX 1395- 93-15-B  WA1UOL 688- 43-16-AB	W3CL 1347- 64-17-ABC K3KEL 1350- 75-18-B WA3ETR 988- 52-19-B W3GPY 528- 24-11-C	NØACI) 1900- 95-20-AB Louisiana	W8IDU 4284-127-28-BCD WD8QWP 3360-152-20-ABD WA8ABN 1743- 83-21-AB WB8AAX 720- 90- 8-B	Maritime - Newfoundland
K1TK 392- 56- 7-B K1JG 204- 17-12-B W2SZ/1(WA1s HCO UGE,WB1CBH, K2TR.N2FU.W2GN.WA2s FKS	AA3W 510- 30-17-B WB3FTD 120- 24- 5-B W3FMF 80- 16- 5-AB W3AD(K2NF KB3AP N3s FG PT	K4CHE/5 312- 26-12-AB WB5LBT 266- 33- 7-BD	WB8WIM(+WB8UHS) 490- 49-10-AB	WB2RLK/VE1 21 7- 3-A Quebec
K2TR,N2FU,W2GN,WA2s FKS SPL,WB2s BXP GFP PKO, WA2USA,oprs) 77,441-676-91-ABCDE	W3AD(K2NE,KB3AR,N3SEG RT, WA3s RKM WUL,WB3s CTL CTU, oprs) 50,281-585-77-ABCD K3LZ(+WB2YEH,K3UU,WA3s	Mississippi W5UCY 441- 39- 9-BD WA@DXZ/5 198- 22- 9-B	WA8OGS 9560-239-40-AB K8NN1 6996-13-40-AB D K8NN1 6996-13-40-AB D K8NN1 596-13-40-AB D K8DW 2592-144-18-D K8DW 2592-144-18-D K8DW 2598-822-ABD K8ZES 1296-101-12-BD WD8DN 180-30-6-A WD8RMT 180-20-4-AB	VE2KW 660- 44-15-AB Ontario
SPL_WB25 BXP GFP PKO, WA2USA,oprs) 77,441-676-91-ABCDE WINY(AC1T KIBE,KAIAPR, WIKK,WAIS CYK ECR RWU, WBICAC,oprs) 25,704-459-56-ABCD WBIAKT (+WAIS UWX WRK WRM) 3120-130-24-AB	KPP LBI NAY PUL TUL WAK ZFD) 40,032 449-72-ABCD W3LP(W3s GFN JUZ,WA3JXW, opr) 5082-154-33-AB	Northern Texas K5GMX 516- 43-12-AB WB5KTC 384- 47- 8-ABD	WA8TTS 3432- 52-52-ABD K8WW 2592-144-18-D K8DW 2508- 88-22-ABD	VE3BQN(VE3ABG,opr) 12,054-289-41-ABCDE VE3UH 11,154-266-39-ABD
WB1AKT(+WA1s UWX WRK WRM) 3120-130-24-AB	Maryland - D.C. WA1NGR/3	Oklahoma	K8ZES 1296-101-12-BD WD8DVD 180- 30- 6-A WD8RMT 115- 23- 5-B WD8NMY 80- 20- 4-AB	VE3FN 1870- 85-22-B VE3FMS 1034- 94-11-R
2	WATNGR/3 21,417-296-59-ABCD W3XO 17,576-298-52-ABD K3HCE 14,112-255-48-ABD	K5CM(+K5s MWH SW,N5KW, WB5HLR)18,630-312-54-ABD	WD8NMY 80-20-4-AB WD8ROA 75-25-3-B W8VP(K8AL,KA8AMF,W8s LBB PR,WA8AHD,WB8s DQE ERB ONY SXT TSI,WD8s AHV AKI KTK LVJ	VE3FHM 800-45-16-ABD VE3EVW 495-24-11-BD VE3AEA/3(VE3s FDP IQZ,oprs) 2373-93-21-BD
Eastern New York K2CBA(WB2DNE,opr)	21,417-296-59-ABCD W3XCD 17,576-298-52-ABCD W3HOCE 14,112-255-48-ABD W3OZ 3320-83-20-D W4HNW/M3 1997-103-18-ABC W3HOX 1495-115-13-B W3HOX 1495-115-13-B W3HOX 1495-115-13-B W3HOX 1495-115-13-B W3HOX 1495-115-13-B W3HOX 163-20-3-B W3HOX 163-20-3-B W3HOX 17,731,77,73-1,73-3-1,7	Southern Texas  WB5WJT 806- 53-13-ABD  WB5UER 432- 61- 6-BD	QJB,oprs) 33,123-478-61-ABCD W8CCI(W8s DJY UL,WA8WMH, WB8s EEX NFJ,oprs) 22,446-363-58-ABD	British Columbia VE7XF/7 392- 56- 7-AB
K2CBA(WB2DNE,opr) 23,100-270-70-ABCDE K2OY 9576-207-42-ABC K2SHB 2548-98-26-AB WA2ANZ 819-63-13-B	W3MSN 390- 38-10-ABC W3BOU 60- 20- 3-B W3PGA/3(K3s CWZ FRX PHH ROJ	6	WA8PLZ(WA8SVV,WD8s MSF ROD oprs) 4698-162-29-AB W8GOH(+W8HEG)	DX
W2IP 231- 21-11-B WA2PVV(+K2WF,KA2APE, WB2MJS.WB4BMZ)	14.688-271-48-ABCDE	East Bay N6AMG 1150-115-10-AB	2112-132-16-B West Virginia	Bahamas K4GFG/C6(+K4XF,WB4KGY) 124- 31- 4-AB
12,408-233-47-ABD WA2FPF (+KA2AK5,K2QE,WA2s FPG OQN YGE,WB2FPL) 2495- 96-26-AB	WB3DPN(+WA3NQJ) 3384-141-24-AB	N6AMG 1150-115-10-AB K6KLY/6(+WA6JUD) 28,738-596-38-ABCDE Los Angeles	WA2FGK/8 8077-174-41-ABCD W8AEC 4158- 96-33-ABD K9ZNK/8 2831-149-19-B	124- 31- 4-AB Japan
New York City - Long Island	Western Pennsylvania WA3CPH 2550-150-17-B WB3CBB 2373-113-21-A	WB6OKK 2760-138-20-AB	WB2DIN/8 2295-153-15-B K3LNZ/8(WA3s EOQ NZL,W4PSJ, oprs) 18,352-313-54-ABCD	JE1HYR 1- 1- 1-A Netherlands
WA2SLY 2260-113-21-B WA2DZD 627-51-11-BC WA2EUS 374-30-11-BD	W3BWU 1240- 62-20-AB W3GNR/3(+K3s PS TFL,W3INK, WA3s BIJY FFC GOLL FFN WR3s	W6GGV 1596-68-21-ABD WA6HXD 639-71-9-B W6NXB 408-51-4-C W6CN 342-32-6-BC K6PHE 116-29-4-A	9	PA@XMA 0- 0- 8-BD
WA2FUZ(+WA2YJF) 18,200-281-52-ABD K2OVS(Multiop) 7272-202-36-AB	DCZ DDA DVR,oprs) 21,106-419-57-ABD W3KWH(K3RYA,W3s ION SVJ TVB,WA3FYJ,WB3s BRY EHQ, oprs) 5973-181-33-AB	W6NXB 408-51-4-C W6CN 342-32-6-BC K6PHE 116-29-4-A N6YB 110-15-5-BC W6PFE 76-19-4-B WB6TAM(WA6NIS W06s BJS CGF DRI,oprs) 2299-150-11-ABC	Illinois GW3NJY/W9 11,439-245-41-ABD	Check Logs WB3AIT,W4MNZ,W7FN,WB8GEX
, 2, 2-202-30 MB	oprs) 5973-181-33-AB	DR1,oprs) 2299-150-11-ABC	K9HDE 1701- 66-21-ABD	