Results, June VHF QSO Party

Persistence: "Stubborn or enduring continuance, as in a chosen course; resoluteness; tenacity" — Webster's New World **Dictionary**

By Mark J. Wilson,* AA2Z

quick look at the various tables and boxes accompanying this write-up pretty much tells the story of the VHF OSO Party held last June 11 and 12. Conditions were not outstanding, but that would have been too much to expect for two years in a row. This time last year, we were writing about the great aurora, tropo and double-hop E_s of the 1982 contest.

Delving a bit further into the history of the June vhf contest, however, we see that this past event was par for the course. A total of 510 hams sent in logs. The top single-op score was around 75K, and the top multi around 300K. There was single-hop E, to be worked on 6 meters. There was some aurora for the last half hour or so. There were big mountaintop efforts and little mountaintop efforts. There were big homestation efforts and little home-station efforts. Everyone had a great time.

The single-hop E_s on 6 gave the South and the Midwest the opportunity to rake in the multipliers. N5KW and crew found the most -61 - followed by WD4MBK and crew at 57, single-op KC5GB at 55, and multiops AAØL and W9UD at 54. Besides the same old stateside stuff, there were a few DXpeditions to work. Thanks to C6ADV, FPØSM (K1TOL), XE2XW (W5XW and friends) and ZF2EW (K1FJM) for taking the trouble to make the contest more exciting for everyone.

Two meters took a bit of a beating this time. Reports from all call areas indicate that general activity was not as good as in other years, and that things were especially slow on Sunday. As it turned out, the June contest was also one of the first decent weekends of the season weatherwise in many parts of the country. For many ops who normally spend the second weekend of June glued to their radio sets, the lure of the beach and barbecue was just too much. This same weather, however, made a wonderful weekend for mountaintopping. The aurora during the last half hour made 144.100 sound like the low end of 20 during a DX contest, adding to section totals and general excitement.

Activity on the higher bands has been growing every year as more and more people move upward and commercial equipment becomes more and more available. Just four years ago, in June 1979, top multiop W1FC posted a single-band 220 score of 2006 points (59 QSOs in 17 sections). This year, W3BBS had 26 multipliers and almost three times the score. The 432-MHz QSO total to beat this year was 172 by W2SZ/1. A quick comparison of the top three multiop logs shows that there were about 200 QSOs to be had (nobody ever works them all!). And on 1296 all call areas appeared. The big mountaintoppers are

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Top Ten			
Single Operator		Multioperator	
AA2Z/3 K1PXE K2CBA WA1UQC K1EM KA1APR WA2TEO KA2BTD K3HP W2EIF	76,356 50,130 44,932 38,802 33,820 30,723 30,388 29,852 29,700 28,440	W2SZ/1 W3BBS W1VD K1TR K3YTL W1TKZ WA2SNA W8VP W1QK N2SB	298,560 203,145 181,536 173,476 119,416 108,300 108,226 103,621 84,800 84,148



Are these guys nuts, or what? The W4BFB crew took their traveling road show on a 22-hour round trip to Woodall Mountain in Mississippi. Operators (I-r) included N4VC, AA4ZZ, WD4ABZ, KU4V, WA4VCC and KS4S.

getting more serious about this band all the time - the W3BBS group lugged a 16-ft dish and a 500-W amplifier to their site.

The scores reflect the mediocre conditions and lower activity levels. Only the top two single-op stations — AA2Z and K1PXE — would have made last year's Top Ten listing. And without any spectacular 6-meter openings, the top scores all came from the Northeast. No W9IP, WB8IGY or W9OEH near the top of the list this



WD5CAW and K9IKI lugged their gear up a New Mexico mountain in this 1961 Jeep. (K9IKI photo)

time. Among the multiops, the W2SZ/1 group cashed in their microwave chips again this year and won by quite a bit. The familiar W3BBS call sign took second place, while W1VD made third. All of the Top Ten single ops this year were home stations, while all of the top multiops except W1VD and N2SB were mountaintoppers.

Only two of the Division Leader scores reflect new all-time records. Single-op AA2Z added 31,000 points to the Atlantic Division record held previously by K3SXA from the 1981 contest. In the Midwest Division, W9UD and crew traveled to Missouri, where they erased the 1979 WOOHU record by 11 kilopoints.

When band conditions are only average at best

Division Leade	rs ·			
Single Operator		Division	Multioperator	
Call	Score		Call	Score
AA2Z/3	76.356†	Atlantic	W3BBS	203,145
VE3ASO	21.868	Canadian	VE3VHF	31,570
W3EP/9	8925	Central	K9MRI	30,400
WØXG	8924	Dakota	KØALL	3914
N4JS/5	14,400	Delta	W4BFB/5	40,107
WB8BKC	19,825	Great Lakes	W8VP	103,621
K2CBA	44,932	Hudson	WA2SNA	108,226
NØLL	10,600	Midwest	W9UD/Ø	80,0041
K1PXE	50,130	New England	W2SZ/1	298,560
W7ZSL	5852	Northwestern	N7NW	21,462
N6CT	12,150	Pacific	K6GSS	46,400
WD4GXN	17,536	Roanoke	K3LNZ/8	83,106
W5FF	8140	Rocky Mountain	AAØL	34,950
W4ODW	18,666	Southeastern	WD4MBK	65,700
WB6DTA	14,577	Southwestern	WA7LYI	37,468
KC5GB	21,376	West Gulf	N5KW	61,288
ZF2EW	8028	DX	XE2XW	7095

findicates new division record

50 MHz
MA10UB 16,250 WB8IGY 16,000 KC5GB 13,805 AF1T 12,556 KA1APR 10,841 WD4MGB 10,692 WB5DSH 10,458 AA2Z/3 9945 W3ZR 9328 CY1YX 8569 W1VD† 23,100 NSKW† 22,997 W2SZ/1† 21,216

Multi	plier	Lead	ers
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Single Operator			-	
50 MHz	144 MHz	220 MHz	432 MHz	1296 MHz
WA10UB — 50 K2CBA — 40	K1FO — 29 KA2BTD — 24 WA2TEO	K1PXE — 17 W2EIF — 13 K2CBA	K1PXE — 22 K2RIW — 22	K1PXE — 11 W2VC — 11
AA2Z/3 — 45	WA3FYJ — 23	AA2Z/3 — 15	AA2Z/3 — 17 W3IP	WA3JUF — 10
WB8IGY — 50	WD4GXN — 24	WD4DGF — 11	K4CAW — 15 W4DFK WD4GXN	W3IY/4 — 5
KC5GB — 55 N6CT — 31 K1SC/7 — 30 WB8BKC — 32 W3EP/9 — 33 NØLL — 41	W5RCI — 12 N6AMG — 13 WA1JXN — 20 WB8DRR — 20 WB9MSV — 23 WB8SWD — 15	W5RCI — 8 WB6DTA — 6 (7 stns) — 2 K8DIO — 17 W9SR — 17 KØDAS — 8	W5RCI — 9 AJ6T — 7 WB9AJZ — 5 K8WW — 16 W8UT/9 — 6 KØDAS — 10	WA5VJB — 1 N6CA — 9 (4 stns) — 2 K8WW — 10 —
CY1YX — 41	VE3ASO — 23	NØCIH VE3BFM — 8	VE3FN — 12	VE3BFM — 2
Multioperator				
50 MHz	144 MHz	220 MHz	432 MHz	1296 MHz
W1VD — 50	K1TR — 25 W1VD	W1VD 24	W2SZ/1 — 24	W2SZ/1 15
N2SB — 42	K2NE — 23 N2SB	N2SB — 19 WA2SNA	WA2SNA — 21	K2BWR — 10
W3BBS — 42 WD4MBK — 57 N5KW — 61 W6XJ — 33	W3BBS — 30 AB4L — 25 N5DL — 17 K6GSS — 11 K6HXW W6XJ	W3BBS — 26 W4IY — 13 N5DL — 9 K6GSS — 11	W3BBS — 27 AB4L — 17 N5DL — 11 W6XJ — 15	W3BBS — 15 WD4MBK — 4 N5KW — 2 WB6AAG — 6
WA7LYI — 41	WA7LYI — 9	WA7LYI — 6	KA7CVV — 7 WA7LYI	WA7LYI — 5
WD8ISK — 52 WB8HUC — 40 AA9L — 54 W9UD/9	W8VP — 32 K9MRI — 28 W9UD/0 — 25	W8VP — 23 K9MRI — 10 W9UD/0 — 14	W8VP — 22 K9MRI — 8 W9UD/0 — 16	W8VP — 6 K9IMM — 1 W9UD/Ø — 4
VE3VHF — 33	VE3LNX — 20	VE3LNX — 12	VE3VHF — 12	VE3LNX — 4 VE3VHF

and activity is down, what is the key to a winning operation? One of the most important qualities an operator can possess is persistence. This is true of all contests to some degree, but it is most important in a contest with a limited number of stations to work. When the QSO rates on Sunday are down to five per hour, the successful op will hang in there. While the others who found five contacts an hour too much to stomach are off sleeping or watching TV, the winning ops will be there slowly building their contact totals and even occasionally working a new multiplier. After all, 10 slow hours can produce 50 or so QSOs that a less-persistent op won't get.

The other thing a successful op can do when there isn't much to do is find new things to do. For example, Alaska is probably the closest thing to a vhf wasteland. Yet WL7ACY submitted a 161-QSO 6-meter single-band entry — filled with 160 JA contacts. W2SZ/1 added another microwave band this year and picked up four multipliers on 5.7 GHz.

EME is growing in popularity during the vhf contests. Single-op WA1JXN/7 and multiop AAØL used this mode to boost their 144-MHz section totals to 20 and 17, respectively — great totals from the boonies! K1FO got on 144 EME also and posted the top first-call-area section total for that band. Speaking of EME, we got

single-band 432 logs from DL9KR and JA9BOH. Who did they work? Look at the 432 section totals for W6XJ and W3BBS for starters. There are ways of increasing the score when things aren't great. It's just a matter of identifying these ways and then doing them.

The rules changes adopted for this past June contest were generally well received. Most ops agreed that dropping the mandatory off-time was long overdue. Most of the big multiops and a few of the single ops took advantage of the new rule and operated 'round the clock. Generally, the new ending time was appreciated, although some stations expressed disappointment that the best opening of the weekend occurred just after the contest ended. The expanded multiplier scheme brought favorable comments. All four VE1/VO multipliers were active this year, including an expedition to New Brunswick by WIJR.

Although this June's vhf contest had its problems, it was still a great way to spend a weekend. Certificates will be in the mail by September 15. Are your ready for the September VHF QSO Party in a few weeks?

SOAPBOX

The homebrew 4CX250B amp dumped one power transformer Saturday with a shorted primary. The remaining power transformer shorted the secondary on Sunday and sent a 5-ft blast of "chapopote" and smoke

with all the fury of "El Chichonal." The fuse, per Murphy's Law, protected itself and will be reused next year (XE2XW/W5XW). The last 19 minutes of the contest made the rest of the slow, sometimes boring 32 hours and 41 minutes all worthwhile. Just wish that the aurora had arrived sooner (WA1STO/W1VD). This was our trial run at contesting from a very famous vhf mountaintop location, Cadillac Mountain, near Bar Harbor, Maine. Cadillac Mountain is the highest point on the entire Atlantic seacoast in all of North and Central America; at over 1500 feet directly above the ocean, and on an island, it is a superb site. We only operated for 4-1/2 hours and made 130 QSOs using low-powered solid-state gear and simple antennas, but could tell that the site is terrific and we're looking forward to returning in June '84 for an all-out effort...we did manage a few 600-mile contacts on 220 and 432 MHz, using only 80 W to single Yagi antennas. . If you've never been to Cadillac Mountain, you cannot imagine what a really clear sky looks like. Breaking down our antennas at 2 A.M. became a major effort because we were so distracted by the dazzling array of stars overhead. Mother Nature put on quite a show, and we view constellations that we had only heard about previously, and are never visible in the NY/NJ area (WA2VUN/1). Our operation this contest was from the summit of Green Mountain, west of Boulder, Colorado, at an elevation of 8144 feet. No roads exist to the summit, so all equipment was backpacked up to the site (W1XE/WØIA). I always thought that Rhode Island was a "rare" Section, so I decided to be "big DX" and operate from my sailboat in East Greenwich Harbor in Narragansett Bay. Well, others had similar ideas. I found out that 10 W to a dipole swinging on an anchor does not compare to 150 W to an F9FT Yagi. I was buried, or shall we say, drowned (W1JP). This was the best aurora I've caught in six years of vhf work. I never worked east of PA before on aurora. The signals were so loud (WØRT). Our best vhf contest yet. Addition of 432 and 10 GHz kept things interesting. Good 6-meter openings really livened things up. Would prefer to exchange grid squares in all future vhf/uhf contests. We hope to have a 4-ft dish at 200-plus feet for the uhf contest on 10 GHz. In Montreal, there are six or seven people on 10 GHz (VE2CUA). First perfect weekend in over 13 weeks (hot and sunny), and I contest. Thanks to my very understanding family (WA2ABN). As for contesting out West, it's the pits! I'd be ashamed to turn in a score like this in Virginia, but out here (UT) things are different. Mountains, long distances and a paucity of whfers make the contest a definite challenge (WA4GPM. . . 260 QSOs and 15 bug bites for a whopping rate of 17.3 QSOs per bite (QPB?)...you know things aren't going well when the (QFB)...you know timing out at a going to the contain that you are using collapses midway through the contest (WB1GQR). The last three QSOs of the contest added almost 370 points, or 16%, of the final score. I think that the contest is won or lost on Sunday afternoon (VE7ASI). You cannot imagine how difficult it is to explain to a DX station during a cw contact via moonbounce what that station is supposed to send for an exchange. Actually, they must think we're crazy since we already know what country they are in from their call. I actually had one station start again and do the contact right from the beginning. He obviously thought that if I kept asking for his country that I could not possibly have his call correct... Of course, it would be more sensible to use some internationally understood exchange if the contest is to continue to be open to DX stations. Until then, however, I suggest that the rules be changed to permit DX stations to give a signal report instead of their country name (WAIJXN). We didn't have any objections before the contest about the earlier ending time, but if you are going to end the contest at 11 P.M., why did you have to schedule that beautiful aurora to start at 10:30? It sure caused quite a rush at the end, but it would have been nice if we could have had more time to work it. On the other hand, if the contest had not ended early, we would not have had the chance to go outside and actually see the aurora, which was quite a sight as viewed from Mt. Equinox (W1TKZ). Finally, at long last, I worked Arizona on 144 MHz. And he answered my CQ (K5MAT)! My 4-element beam on 6 meters was a 6-element beam on 6 meters until the tornado hit (KC5GB).

FEEDBACK

Please refer to Sept. 1982 QST, page 77, for the following corrections. In the multiplier leader box for single-op stations, WA2GSX should be listed as the 144-MHz second call area leader, with 28 sections; W2VC should be listed as the 1296-MHz second call area leader, with 11 sections; and WØRWH should be listed as the 144-MHz tenth call area leader, with 20 sections. In New Mexico, the second-place single op is really W5RKS, not WB5RKS. In Michigan, the call sign of the top multiop should read WD8M/Q. In Washington, add WA6NHB/7 with a line score of 3097-163-19-AB to the single op list; we found his log with the Field Day entries.



W9UD and friends traveled to Missouri this year to set a new all-time Midwest Division record.



KC5GB took full advantage of the good single-hop $\rm E_s$ openings to net 55 6-meter multipliers and win the single-op West Gulf Division title.



WA7PVE and his pal Skeksis the Spiny Tailed Iguana teamed up for 70 QSOs from Washington State. Quite a pair, huh?

SCORES

Scores are listed by ARRL section. Within each section, single-operator, multiband scores are listed first, then single-operator, single-band scores starting with the lowest frequency band, and then multioperator scores. From left to right, each line score lists: call, score, number of QSOs, number of multipliers, bands operated (A — 50 MHz; B — 144 MHz; C — 220 MHz; D — 432 MHz; E — 1296 MHz; F — 2.3 GHz; G — 3.4 GHz; H — 5.7 GHz; I — 10 GHz; J — 24 GHz; L — light). The call sign of the top single-op station in each section is indicated in bold-face type. The single-band award winners are indicated by **bold-face** type for the letter(s) denoting the band(s) won. For example, in Connecticut, K1PXE is the single-operator section award winner, and he also had the highest single-band scores on 220, 432 and 1296-and-up MHz. WA1UQC had the top 50-MHz score, and K1FO had the top 144-MHz score. W1VD is the top-scoring Connecticut multiop.

1	WlJSM 2100- 100- 21- B	N2BAR 6768- 188- 36- AB	Western New York	W3LP (W3s GFN, JUZ, WA3CUQ, oprs. 20,724-255-66-ABCD
	W1HNZ 1330- 95- 14- B N1CR 80- 16- 5- B	WA2SLY 6534- 198- 33- AB K3JNZ 3861- 122- 27- ABD WA2EUS 1818- 80- 18- BDI	K2GK 11,220- 161- 55- ABCDE WB2KIW 9790- 169- 55- ABD	W3HZU (K3s GDI, HPI, N3s AIA, AUO, W3SST, WB3AWJ, oprs.)
Connecticut		K2MUB 3780- 105- 36- A	K2LZF 9164- 146- 58- ABCD K2OS 5728- 179- 32- AB	5934- 129- 43- ABD K3NYX (+AI3Q, K3IJ, W3s IVG, TI)
KIPXE 50,130- 373- 90- ABCDE WA1UQC 38,802- 371- 87- ABCDE	Rhode Island	WB2TCQ (WB2RNT, opr.)	K2MQY 5577- 143- 39- AB	1445- 85- 17- B
K1EM 33,820- 383- 76- ABCD K1GX 7514- 221- 34- AB	WIAJR 4012- 118- 34- AB KIDT 243- 18- 9- BCD	3171- 151- 21- B KE2N 2360- 118- 20- B	WA2ABN 5456- 139- 31- BD KC2AW 192- 24- 8- AB	
W1FAJ 6885- 117- 45- ABCD KA1BXB 4736- 124- 32- BCDE	WIJP 216- 24- 9- B KIDS (+KA1FRI, KM1X, Wls JI,	KA2BPP 900- 75- 12- B K2RIW 6116- 139- 22- D	W2RHQ 1450- 58- 25- A W2CNS 3565- 155- 23- B	Maryland
WAIHYN 3120- 100- 26- BCD WAIZNT 3120- 104- 30- AB	XO, N4HY) 30,084- 353- 69- ABCDE	KC2GE (+WB2PSD) 1768- 104- 17- B	K2PQI 1066- 82- 13- B K2JIQ 782- 46- 17- B	W3IP 25,047- 147- 69- ABCDE K3AKR 6292- 110- 44- ABCD
K8CH 2492- 66- 28- ABD WA1GTP 1104- 48- 23- AB			W2WGL 490- 35- 14- B W2AWF 253- 23- 11- B	W3JPT 2700- 100- 27- AB N3API 2444- 94- 26- AB
WIAW (WB2TRN, opr.) 192- 19- 8- BD	Vermont	Northern New Jersey	WB2YIZ 68- 17- 4- B W2MPK 270- 15- 9- D	W3MSN 308- 23- 11- ABCD K13L 4795- 137- 35- A
K1FO 7946-274-29-B W1FXS 2560-160-16-B	WB1GQR 11,792- 260- 44- ABCE WA1TBV 756- 42- 18- A	KA2BTD 29,852-353-68-ABCD WB2QOQ 27,537-324-67-ABCDE	W2RCX (KA2OQZ, WA2YTM, WB2s IEY, ODH, WA3PXH, oprs.)	WA3FAE 3097- 163- 19- B N3CDA 1264- 79- 16- B
W1CNU 900- 60- 15- B AB1U 450- 45- 10- B	WITKZ (KIS TK, UR, NIS ADY, CGF, CPE, WIS GCI, OOP, WAIPQY, N2AWG,	WB2WIH 26,532-316-66-ABCD N2BMN 22,320-294-60-ABCD	16,896- 233- 64- ABCD K2HE (KA2s KGK, MCO, W2UCZ, oprs.)	
NICLW 70- 14- 5- B KH6WZ 45- 15- 3- B	oprs.) 108,300- 763-114- ABCD	WA2CWA 20,473- 347- 59- AB W2TC 10,008- 218- 36- BD	6720- 151- 40- ABD K9JR (+KC2FY, WA2OEV)	FWF, LJK) 40.824- 378- 84- ABCDE
WIVD (+KlJX, KAIGD, WAISTO)	EFI Klik (+KAlBAQ, KFIR, WAlFCD, WBls	W2VC 8525- 120- 31- DE WB2TMD 7854- 187- 42- AB	3248- 115- 28- ABD	40,624 370 64 RB6DE
WlQK (+KlUOL, KAls ECL, DC,FJR, TD, Wls NG, PV, WAls PMA, WXV,	EDA, FSV) 7106- 182- 38- ABC	WA2UDT 7106- 181- 38- ABD WA2GEZ 6120- 176- 30- BD		Western Pennsylvania
WB1s CVW, EZL) 84,800- 700-100- ABCDE		N2BMP 4640- 160- 29- AB K4BNC 3927- 119- 33- AB	3	W3CSA 3432- 104- 33- AB
04,000 700 100 10001	Western Massachusetts	WB2CUT 3870-215-18-B WA2ALM 1560-104-15-B		W3KJM 416- 26- 16- A WA3FYJ 3243- 141- 23- B
Eastern Massachusetts	KA1APR 30,723- 336- 77- ABCD	KR2Q 1515- 101- 15- B KA2HZA 28- 7- 2- C	Delaware	WB3EUM 220- 22-10-B W3GNR/3 (+K3LR, KA3s AWL, DEO,
AD1C 22,685- 254- 65- ABCDE	ACIT 14,336- 207- 56- ABCD N1XZ 7686- 149- 42- ABCD	WA2SNA (K2s BJG, IZL, KA2s IVS, NDS, OVK, N2s AAZ, CJJ, CTF,	K4CHE/3 22,692- 306- 61- ABCD	DWR, WA3s BUX, FFC, JBV, WB3KKX)
W1GXT 14,728- 212- 56- ABCDE WB1FKF 13,255- 164- 55- ABCDE	WA1UOL 338- 26-13-AB	W2s RS, WCE, WA2s JSW, PIK, UPK, WB2s ANK, RFB, oprs.)	K3CNH 1798- 62- 29- AB AC3T (+K3WJV, KA3s B, KZL, N3s	73,645- 574-103- ABCDE K2SPO/3 (+AF2K, KA2s FND, FNO,
KAIDHO 8550- 174- 45- ABCD WAIJOF 7733- 161- 37- BDE	WINY (WIKK, opr.) 3136-112-28-A	108,226- 806-106- ABCDE N2BOW (+N2CEI, KA2MKD, WB2WLM)	AYE, BHS, DÍP) 52,720- 545- 80- ABCD	KS2Z) 8772- 158- 51- ABCD
W1FM 5215- 132- 35- ABD W1JOT 330- 18- 10- BCDE	W2SZ/1 (AG1M, K1DH, KA1s DZV, ZE, WA1s UGE, ZAM, WB1s CBH,	54,824- 475- 89- ABCDE K2NJ (+K2PM, KA2s RBF, RLW, PSL,	I	W3FE (+K3s EAS, FOW) 3078- 105- 27- ABD
KA1AMR 88- 11- 8- AB WA1AYS 8528- 208- 41- A	HIH, AG2X, K2s TR, UF, KA2QHF, KW2T, W2ARQ, WA2s AAU, SPL,	KB2s EF, HZ, KR2T, KU2C, W2GD, WB2NQV)		
K1DAT 1071- 63- 17- A W1QXX 5060- 230- 22- B	WB2s JLR, PKO, AK4L, N8AFM, WA8USA, oprs.)	45,075- 496- 75- ABCDE WB2ONA (+N2CYM)	Eastern Pennsylvania	4
WØRLI 4968- 207- 24- B WA1YKN 1751- 103- 17- B	298,560-1464-160- ABCDE FGHIJ	18,880- 247- 59- ABCDE WA2FXB (+WA2PJZ, WB2QBT)	AA2Z/3 76,356- 612-101- ABCDE K3HP 29,700- 404- 60- ABCD	•
KA1FVG 1326- 102- 13- B N1CKM 54- 9- 6- B	KITR/1 (+KIs BA, EA, KAIR, NIs AFQ, BEM, RC, WAIs ONB, PBU, VFJ,		WB3JYO 20,299-315-53-ABCD K3IWK 13,908-223-57-ABD	Alabama
N1BLI (+N1BCG) 12,098- 250- 46- ABD	K3WM) 173,476-1153-124- ABCDEI		KB3NQ 7511-214-29-BCD W3CL 3016-79-29-ABCD	WA4CQG 16,933- 263- 59- ABCD WA4EWA 14,701- 227- 61- ABD
W1XM (W1XG, WA4TTG, oprs.) 6279- 90- 39- ACDE		Southern New Jersey	N3ET 4004-182-22-B WA3DNM 3740-187-20-B	W5WZF 2232- 62- 36- AB WA4VUG 48- 12- 4- B
	2	W2EIF 28,440- 292- 76- ABCDE	KF3Y 3192- 152- 21- B	KA4AOK (+KA4CFZ) 1794- 78- 23- A
Maine	2	KS2T 23,374-329-62-ABD W2HRW 15,840-263-55-ABD	WB2BJH/3 924- 66- 14- B WB2MBM/3 228- 38- 6- B	
W1JR/1 2890- 62- 34- ABCDE W3HQT/1 840- 50- 15- BE	Eastern New York	WA2KOK 9016- 169- 46- ABCD K2JF 7770- 193- 37- ABC	KA3EJG 6- 6- 1- B WA3JUF 780- 26- 10- E	Georgia
W1PLX 800- 50- 16- B K1BZ 209- 19- 11- B	K2CBA (WB2DNE, opr.) 44,932-402-94-ABCDE	N2BYE 3857- 130- 29- ABC KITO 2028- 71- 26- ABD	W3BBS (K3s II, RLM, RYL, N3s AAX, CCW, W3GPY, WA3s BRW, IAO, KPP,	NA4I 6396- 152- 41- ABD AK4T 3404- 92- 37- AB
KIWHS (+Kls LL, MNS, WB1FGW) 39,026- 400- 79- ABCDE	30 388- 375- 71- ABCDE	WAZONK 4086- 227- 18- B N2CRK 1316- 94- 14- B	LBI, PUL, UGP, WAK, WB2s IJT, YEH, WB3s EFI, ESQ, ESS, JZE,	KA4KKF 2610- 89- 29- ABC W4ISS 854- 43- 14- BD
WA2VUN (+KT2B, WB2WIK) 7380- 128- 45- ABCD	N2BJ 12,172- 306- 34- BD W2IP 1008- 53- 16- BD WA2GFP 10- 3- 2- BL	KB2GW 966- 69- 14- B WA2DFH 420- 42- 10- B	oprs.) 203,145-1054-145- ABCDE	NZ4Q 238- 27- 7- BD
	K20E 3906- 186- 21- B	N2SB (+KA2NYF, WB2s NPE, RVX) 84.148-589-109-ABCDE	FJ	KE4WT 1664- 64-26- A WD4MBK (+AA4GA, N3AHI, N4HSM,
New Hampshire	W2AWX (+AB21, AB2J, K2DPL, WA2s ENM, TIF, WB2s DVV, FHR, KMY) 81,130-705-95-ABCDE	K2NE (+KA2s CQX, RRK, WB2s ANJ, KKS, UVB, KF3T, WA3RKM)	N3s CXB, DAP, DAX, W3DZH, WA3s JWP, YON, WB3s CAI, FAA, FKQ,	W4VHH, WA4OYH, WB4NMA, WB8DTM, WD4IIS)
W1EJ 22,496- 219- 74- ABCDE		47,163- 520- 79- ABD	FYT, oprs.)	65.700- 574-100- ABCDE
	KA2Q (K2ACA, W2s GXU, YJO, WA2s	K2BWR (+K2ZRJ)	119,416- 792-118- ABCDE	K4CKS (+WD4JLI)
AFIT 17,836-309-52-AE ACIJ 10,080-197-45-ABCD	E KA2Q (K2ACA, W2s GXU, YJO, WA2s ALV, NKP, WB2OPC, oprs.) 800- 50- 16- B	K2BWR (+K2ZRJ) 36,566- 266- 94- ABCDI	119,416- 792-118- ABCDE E W3AD (K3HEC, N3s BCZ, BNA, W3s G. CWE, IPX, OLV, WA3s HMK, PHL,	15,045- 250- 59- ABC
AC1J 10,080- 197- 45- ABCD N1BC 4600- 106- 23- BD WA1GDR 1752- 73- 24- AB	ALV, NKP, WB20PC, oprs.) 800- 50- 16- B	K2BWR (+K2ZRJ) 36,566- 266- 94- ABCDI W2AUZ (+KS2D, N2CTW, W2s AUZ, JAC WA2s LLN. WVJ. WB2s CWO. STV)	E W3AD (K3HEC, N3s BCZ, BNA, W3s G, CWE, IPX, OLV, WA3s HMK, PHL, WB3BNB, oprs.)	15,045- 250- 59- ABC
AC1J 10,080- 197- 45- ABCD N1BC 4600- 106- 23- BD	ALV, NKP, WB2OPC, oprs.)	K2BWR (+K2ZRJ) 36,566- 266- 94- ABCDI W2AUZ (+KS2D, N2CTW, W2s AUZ, JAC	E W3AD (K3HEC, N3s BCZ, BNA, W3s G, CWE, IPX, OLV, WA3s HMK, PHL,	

WB4HXY 10,089-155-57-ABCD KF45T 1180-59-20-A N4AR 3040-152-20-B N4ELQ (*KA4s TAY, TET, N04R) 9592-199-44-ABD	K5GMX 10,638- 197- 54- AB WB5KTC 7298- 176- 41- ABD	KD6PY 1040- 52- 20- A N6RZ 790- 79- 10- B N6MG 272- 34- 8- B WA60CV 153- 17- 9- B AJ6T 504- 36- 7- D K6CSS (+W6YKM, WA6s AZP, HCI, VEF, WB6s KBZ, YIY] 46,400- 613- 58- ABCDE	WD8ISK (+KC8RD, N8s BPB, ECH, WA8s BBR, OGS) 45,848-465-88-ABCDE WD8JPP (+WA8ZW1) 7840-190-35-ABCD K8CQA (+WB8s JAY, TEI) 4368-156-28-AB K8UZW (AB82, KA8s HUZ, HXX, KC8QU, oprs.)	M@IRP 2233- 77- 29- AB K@CB 1472- 62- 23- ABCD KABNNO 1372- 49- 28- A M9UD/Ø (+AE9M, AKØP, K9s AKZ, CHZ, M9IP, W@OHU, WBOQFI, WOPFSA) 80,004- 610-113- ABCDE
## 4480- 118- 28- BD N2CJP/4 1633- 64- 23- ABD WDAODDS 920- 46- 20- AB WAAVDS 1118- 86- 13- B KAAVUB 328- 41- 8- B KAAVMA 100- 25- 4- B N4YN (+KAA:, TDT, 2BX, W1GFM, WAAQCO, WC42) 17.110- 265- 59- ABCD WAAWZQ/4 (+KAYBC, KAAHKK, NACYC, WA4* NDF, WZP, WDAGQU) 14, 228- 244- 52- ABCD WB4TQD (+NT4T) 2375- 85- 25- ABCD	NSDSH 18,144	7 Alaska KL7/ME	1280- 62- 20- ABD	### 4224 - 132 - 32 - AB KFBY 3810 - 127 - 30 - AB KBUS 3255 - 93 - 35 - AB KABCRI 1728 - 72 - 24 - AB NBUS (+KBNG, KABS ABA, JGH, KCBS BM, OG, QR, HASWRI, WBBS DGF, HXY) #### BALL (+KNBA, KOBC) 3914 - 99 - 38 - ABCD
Horthern Florida 18,666-278-61-ABCDE 18,666-278-61-ABCDE 184CSS 3815-109-35-AB K4KJP 360-23-12-ADE	8415- 167- 45- ABCD DB7SQ/W5 (+KD5RQ, WB5LMJ) 2565- 95- 27- AB Southern Texas	#18C/7 4470-149-30-A #B7FDQ 3225-129-25-A #B5FCO 9- 3-1-E WA7LYI (*K700, WA6JTM) 37,468-482-68-ABCDE		VE
NAMIN 3007 23 12 AD WAWHK 6201-159-39-A WHIJW 2700-90-30-A W4ZBB (N4s DXS, HZH, oprs.) 1408-64-22-AB South Carolina	KC5GB 21,376-325-64-ABD KC2TX/5 1008-56-18-AB KA5CAW 4095-105-39-A WA51YX 3366-99-34-A NSFUE 1248-52-24-A KSLZO (+WB5RUS, WB9NFY)	Idaho #7EIJ 2438-106-23-AB WA@DYU 432-36-12-A	KC90A 1100- 50- 22- AB K9PW 385- 32- 11- ABD WB9MSV 3933- 171- 23- B KA9HDZ 1044- 87- 12- B	New Brunswick W1JE/CY1 1620- 55- 27- ABCD VEIAHM 24- 8- 3- B
#4CMW 7548- 135- 51- ABCD N4DT 5280- 121- 40- ABCD WA4LDU 5040- 107- 42- ABD NB4S 836- 76- 11- B K4JLA (multiop) 5808- 176- 33- AB	21,186- 319- 66- ABCD W5UWB (*WASTBE) 16,576- 285- 56- ABD	MALJXM 600- 30- 20- B KB7Q 45- 9- 5- B	K95B 783-87-9-B K9HMB 1344-42-16-C KA9DVY (+KA9HHC, KC9XM, KS9O, N9BZR, WA9RSD) 4000-125-32-AB	Rova Scotia VELUT
Southern Florida W32R 11,178-243-46-AB W4WSR 396-52-6-BDE WA40FS 235-38-5-BD W880ET 16,000-320-50-A	M6AMG MD6CRL 10,857-178-47-ABCDE 9920-233-32-ABCDE K2CMY 47-ABCDE 9920-33-32-ABCDE 650-35-13-ABDE 1034-94-11-8 W65MAC/6 W65MAC/6 42-14-3-8	K3ZAP/7 1938- 83- 19- ABCD WB9AJZ/7 836- 66- 11- BD KA7CVV (*KB7BZ, N7BPA, WA7JUO) 14,256- 259- 44- ABCDE	W3EP/9 8925- 175- 51- AB N9AZC 5280- 107- 44- ABC K9DZS 1525- 61- 25- AB M8UT/9 616- 33- 14- BD K9WZB 2916- 162- 18- B W9SR 1190- 35- 17- C	VEZPUT 2607- 70- 33- ABC VEZKW 144- 16- 8- ABI VEZCUA (VEIBCZ, VEZS BAB, DUB, oprs.) 4440- 101- 40- ABCDI VEZADE (+VEZEHN) 846- 94- 9- B
WDANCB 10,692-243-44-A WB2QLP/4 3915-135-29-A W4Q0 1587-69-23-A K4KUZ 299-23-13-A KB4CRT (+K9IJ, WB4Q0J) 9030-201-43-ABDI Tennessee WDADCF 6384-136-42-ABC	WB6DTA 14,577-267-43-ABCDE NN62 3735-183-15-ABCD W6FPE 2904-106-24-ABC WA6HXM 369-41-9-B NGCA 594-22-9-E WB6AAC (*WB6S-100,000) 11,835-211-45-ABCDE	## 3750 102 25 ABODE ## FGHI ## 7500 102 25 ABODE ## 7710M 3120 127 20 ABCDE ## 7717M 120 23 4 BD ## 7717M 120 23 4 BD ## 7717M 120 23 4 BD ## 7717M 120 25	K9MRI (+K9s SLQ, TVZ) 30,400-346-80-ABCD WB8HUC/9 (WB8s GEH, GEX, GEY, GFA, TCU, WD8BMC, oprs.) 16,225-264-59-ABD Wisconsin	Ontario VE3ASO 21,868-283-71-ABD VE3FCU 11,628-228-51-AB VE3FCN 7176-139-39-ABCDE VE3FCN 7120-168-40-ABD VE3EYR 4278-126-31-ABD
MAGYYK 5085- 88-45-ABCDE KECHX 2697-93-29-36 ADAF 805-35-23-A MAGPTZ (+KA4PWQ, KC415, WA48-LOH, SJB, WUQ, WB4EFC, WD4JTN) 4173- 96-39-ABD	K6BC (KA6YSY, WA6HXD, WB6YVP, OPTS.) 6630-191-30-ABC WD6FIC (+WA6ANL) 1215- 60-15-ABCD Orange	Utah 47BHC 1120- 62- 16- ABCD WEETI/7 1500- 75- 20- A	MA91ZM 1375 55 25 25 A M9TD 768 64 12 B KA9HKL 392 56 7 B K9GDF 166 8- 2 B M9DIJ 3- 3- 1- B K91MM (+KB9NH, WA9's ETW, KCQ) 15,694 241- 59 ABCDE M9CDT (+M9CIQ, WA9HCZ) 400 50- 8 B	VESTFN 3937- 105- 31- BD VESTFN 1242- 54- 23- AD VESTWR (VE3s ABG, AIA, CRU, DSS, oprs.) 31,570- 336- 77- ABCDE VESLNX (+VE3s ADJ, MLW, NSQ) 21,352- 248- 68- ABCDE VE3CKU/3 (+VE3BXI) 5508- 150- 36- ABCD
WDAGXN 17,536-235-64-ABD N4WH 7740-172-45-AB N4RA 6600-149-40-ABD W31Y/4 4620-76-28-CDE K4MSG 2340-117-20-B W4UPK 2070-69-15-D W4UPK K4MSG, K8SYH, KØRI,	K6LMN 8976- 205- 33- ABCDE K6PVS 2916- 78- 27- ABDE Sacramento Valley NR6A 2144- 115- 16- ABCD	Washington W7ZSL 5852- 249- 22- ABCD	g Colorado	Saskatchewan VESRA 286- 22- 13- A VESXU 36- 9- 4- A
KACKI, N4CD, NØKV, WATEFP, WD4SKQ, Oprs.) 43,587-414-87-ABCDE ABAL (+KAMEO, N4A 8ZI, IF, W4AAH, WA4s IVF, LPR, PGI, ZRP, WB4s BSS, WTC, YJC, WD4s BWL, DUT, DUU) 43,492-469-83-ABDEI W4D0 (+AA4D, KA4LXS, KB3KJ,	REGA 2144 - 115 - 16 - ABCD	KK7B 828- 33- 12- ABCDE W7ERH 803- 60- 11- ABCD WA7PVE 770- 70- 11- AB W7F1 128- 172- 24- A N7NW (+K7ND, N7AWX, WYYOZ, WA6NHB, WB7DT1 21,662- 439- 42- ABCDE	EØOST 2862- 101- 27- ABC WAØVSL 1365- 64- 21- ABD WA6ERR)- 135- 24- 5- BD W9MHL 2407- 83- 29- A KØADG 40- 8- 5- A AØBL (*ADØO, K®9YO, KYØO, KYØS, N9NC, NØS DV, EBM, WAZVMS) 34,950- 451- 75- ABCD NØBRI (*KØS CL, DU, NØDVL,	British Columbia VE7ASI 2244- 93-22-ABCD VE7PRC/7 (VE7s BHM, DMT, oprs.) 1680-120-14-AB CY7NOR (VE7s ASY, EIE, EKT, oprs.) 100- 50-2-B
WA4MTP) 18,386-278-58-ABD W4NFR (+KA4MRS, N4GRH, NZ4N, W4NHJ) 7038-153-46-AB	San Francisco H6CT 12,150- 265- 45- ABC WA8LU: 2716- 87- 28- ABD	WB7PEK (+KA7ICT) 3444- 145- 21- ABCD	WØKEA) 22,825-393-55-ABCD WØIA (WIXE, WABZIA, KAØDXM, KRØU, oprs.) 864- 67-12-ABC	DX Bahamas
5 Arkansas WASFDF 7236-134-54-AB HSDL (+KSLG, KDSMD, WASOOE, WD5s CAN, CAP, JWA) 31,457-333-83-ABCD KSGO (+KFØM, WAØVJF, WBØUXP) 11,660-203-53-ABD	W6MSN 2646- 89-27-ABD M16E 864-53-16-AD WB9LOZ 384-44-8-ABC WA9JRB 42-14-3-B San Joaquin Valley WA6SLF (+KF6CY) 4888-188-26-AB WA6BAI (KD6WW, WB6VCL, WD6s	Wyoming W7LFL 640- 40- 16- AB W7KF 1826- 83- 22- A KC7QY 960- 60- 16- A KA7GPN 72- 12- 6- A W87RSM 180- 36- 5- B	Noma WB@ZKC 8729-190-43-ABD K@DAS 6644-119-44-ABC N9ED/9 990-55-18-AB WB@USU 660-47-12-ABD K@JJA 120-15-8-AB WB@FOY 1150-50-23-A WB@SWD 1680-112-15-B	C6ADV 1092- 52- 21- A Fed. Rep. of Germany DL9KR 36- 6- 6- D St. Pierre Is. FP#SN (KITOL, opr.) 6990- 233- 30- A
Louisiana W5UKQ 990- 66- 11- BD B5JM 4795- 137- 35- A W5QEP 3990- 105- 38- A W5FYZ 385- 55- 7- B WB5NIF (+WASYOU) 13,340- 220- 58- ABCD	CNV, DET, oprs.) 2604-113-21-ABCD Santa Barbara W6RIC 1530-78-18-ABC WA6IJZ 2331-111-21-A KD6JY 126-18-7-B KA6VVD 96-16-6-B AA4Q/6 8-4-2-B	Michigan WBBKC 19,825-237-61-ABCDE WABFTA 4482-166-27-AB WABRUJ 1748-92-19-B KABDDQ 414-46-9-B WBBKAY (+NBCKH, WABZVK) 21,842-295-67-ABCD Ohio	MBLL 10,600- 200- 53- AB MBRT 9720- 189- 45- ABCD MBBISW 3948- 116- 28- ABCD AEBC 1953- 93- 21- AB KOBW 900- 50- 18- AB KOWW 900- 50- 18- AB KOWW 495- 44- 9- BD MARCEQ 408- 34- 12- AB MBSP 240- 40- 6- B	Japan JA2DDN 15- 5- 1- A JA1RJU 8- 4- 2- A JA9BOH 18- 3- 3- D Mexico XEIGE 54- 18- 3- A
#4JS/5 14,400- 222- 60- ABCDE WSRCI 3480- 87- 29- BCD WSRCI 3480- 87- 29- BCD WSUCY 2343- 67- 33- ABD W4SFB/5 (AA4ZZ, KS4S, KU4V, N4VC, WA4VCC, WD4ABZ, oprs.) 40,107- 425- 87- ABCD WA5HUX (*N5FM) 5425- 152- 35- ABD		NBAKA/8	### R&PPC 231- 33- 7- B ### Rinnesota #### R&P	XEZXW (K5HVC, KADDTN, M5XW, Oprs.) 7095-215-33-A Cayman Is. ZPZEW (K1FJH, opr.) 8028-223-36-A
W5FF 8140- 183- 44- ABC W5RRS 1694- 74- 22- ABD K5MAT 266- 30- 7- ABC WD5CAW (+K91KI/5) 1520- 70- 20- ABC	Santa Clara Valley RGTCT/6 2496- 104- 24- AB RGFV 1314- 62- 18- ABD KA6ING 1273- 67- 19- AB	K8DIO 1122 33-17-5 K8TI 42-2-18-18-18-18-18-18-18-18-18-18-18-18-18-	Missouri WASMOK 8528- 172- 41- ABCD KGTLM 3910- 109- 34- ABC WGFY 2470- 89- 26- ABD	Checklogs KAIBJ, WAILKJ/Ø, W3PGA, W3WFM, W3BGGU, W4AGZA, KASLVP, W6LLP, W8GGVB, K071Y, W7IDZ, W8CAP, W9YCV, KQØJ,