Results, 1995 ARRL June **VHF QSO Party**

"It seemed there was an ion curtain at the Mississippi River."—KFØM

By Billy Lunt, KR1R and Warren C. Stankiewicz. NF1J Contest Manager

Assistant Contest Manager

It this year! While West Coast and certainly was a tale of two contests Texas operators had the time of their lives working people from all over, the East Coast folks had a dickens of a time working anyone at all! Who says propagation has to be fair? It certainly wasn't this year.

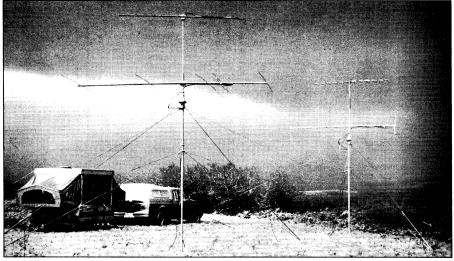
"What are we talking about?" you ask. Well, depending on where in the country you were, these were either some of the best conditions you've ever seen, or some of the worst. If you were somewhere east of the Mississippi, you likely found sporadic-E openings to be few and far between. What openings you did find were pretty short, and didn't extend very far. In fact, we didn't get any reports of double-hop skip at all.

On the other hand, folks from California to British Columbia to Texas had the time of their lives. The bands were open north-south and east-west, and operators were able to pile up QSOs as fast as they could work them. It was possibly one of the best sporadic-E openings they've had during the June contest—6 meters was nearly always open to somewhere at any given time, and 2 meters had some great moments, too.

Just contrast the comments of these folks: Veteran VHFer Gene, W3ZZ, complained, "I thought last June's conditions



Mike, WA9TKK, operated from this beautiful location, at a US Forest Service helipad near Flagstaff, Arizona.

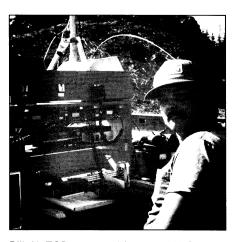


Let it snow! John, K7VNU, operated from DM58 in western Colorado.

were as bad as it got, but I was wrong. These were the worst conditions since I started in 1958. We deserve better than this." Alan, KB2AYU, sighed, "Conditions were as bad as, if not worse, than last year. I completed most of my contacts by brute force." Out in California, Steve, WA8LLY, exclaimed, "Six meters was hot; I worked a lot of new grids. It was great to have activity from Mexico." Leonard, WA6KLK, and his crew reports, "There was so much activity, we had to shut down the FM station most of the time. If we only had more operators, we could have made another 200 or more QSOs! Six meters was open most of the time."

So with both coasts working under different situations, the strategies used by each group were different. The West Coast mountaintoppers used the tried-and-true "work 'em early, work 'em often" approach. Mark, KN5S, had a ball in New Mexico—he worked 208 grids on 6 meters, from CM96 to EL99 to FM25. Out East, it was another of those "work one station at a time, and hope that the band will open somewhere before the end of the contest" weekends. Both were successful; everybody had a lot of fun. It sure would have been nice to have great propagation all over the country, though, wouldn't it?

Maybe it didn't make a difference. We had some great scores, and we had some tremendous scores. Break out the champagne! The N2WK crew has done what few would suspect would be even possible they beat W2SZ in the Multioperator Unlimited category. It was a close, tough fight. We bet that if you ask anyone involved, though, they'd tell you, in an instant, that it was worth it. It sure wasn't easy! Wayne's N2WK group mounted a terrific effort, and the difference was made on the higher bands. The Rochester VHF Group has been working for several years to help many of



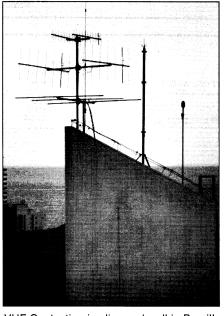
Bill, N7TCD, operated from a 3000-foot mountain 50 miles west of Seattle in CN87.

QSO Leaders By Band Single Operator											
50 MHz		144 MHz		222 MHz		432 MHz		902 MHz		1296 MHz	
KN5S 5 W5KFT 4 (WB5VZL, W5UWB 3 N5HHS 3 N7ML 3 NK5F 3	58 22 op) 83 87 37 35	WA2TEO W9OEH K3EW WB2QOQ N9MKC K1RZ K3ZO AA2UK	398 327 322 322 306 289 256 253	K1RZ WD8ISK KE8FD N1DPM AA2UK K3GNC NW3C	86 66 63 61 58 57 51	K1FO NC1I WA2TEO K1RZ WB2DNE KB2AYU AA2UK KE8FD	224 215 122 116 108 103 100 98	WA2TEO N1DPM WA1MBA K1RZ WB5IGF K2UOP/8 AA2UK WD8ISK	29 29 28 21 21 20 19	WA4VHF N1DPM WA1MBA AA2UK WA2TEO KB2AYU K1RZ WA2LTM	63 42 39 39 39 38 38
WA6TMJ 3 KE7GH 2	102 197 192	WA1MBA KB2AYU	252 248		50 48	WD8ISK N9MKC	97 96	KE8FD WB2VVV	18 15	WB2DNE K2UOP/8	32 32
50 MHz	•	144 MHz		222 MHz		432 MHz		902 MHz		1296 MH	z
W2SZ/1 N2WK WA7JTM -L KB5IUA -L K3MQH -L WD3R/2 W4IY K3YTL WA6TBO -L N8FMD	548 455 422 402 395 387 370 368 348 345	K3MQH -L W2SZ/1 K3YTL N8FMD N2DSY -L W3CCX WD3R/2 N2WK W4IY AB2I	833 755 639 562 534 502 497 496 465 433	N2WK W2SZ/1 K3MQH -L W3CCX N8FMD AA9D K3YTL KB2DMK -L W4IY WB2IEY	193 172 139 114 103 95 92 88 83 77	W2SZ/1 K3MQH -L N2WK N8FMD W3CCX AA9D WB2IEY K3YTL N2DSY -L W4IY	290 276 258 228 179 174 169 167 153		102 69 35 27 22 19 18 14 13	N2WK W2SZ/1 W3CCX W3IP N8FMD W4IY AA9D K3YTL WB2IEY WW8M	123 99 53 45 43 39 35 34 34 32
L denotes Li	imited N	Multioperator									

Multiplier	Lea	ders By B	and								
Single Oper	ator										
50 MHz KN5S W5KFT (WB5VZL W5UWB K7CA N5HHS	208 168 ,op) 148 146 139	144 MHz W9OEH KE8FD N9MKC NW3C W8ULC VE3VD	68 63 59 59 58 56	222 MHz WD8ISK KE8FD W8ULC K1RZ WZ8D NW3C	37 36 32 32 32 30	432 MHz WD8ISK W8ULC K1FO KE8FD NW3C KU8U	45 40 40 38 36 36	902 MHz WA2TEO K1RZ N1DPM KE8FD WA1MBA K2UOP/8	17 16 14 14 14 14	1296 MHz WA4VHF WD8ISK KB2AYU K1RZ N1DPM KE8FD	20 18 17 17 17
AA7A KC4UCE KE7GH NK5F NØLL	137 134 132 131 131	WD8ISK K2GAL K1RZ WZ8D WA2TEO	54 53 52 50 50	WA2TEO W3ZZ AA2UK N1DPM K2UOP/8	30 23 23 23 23	WA2TEO WZ8D WB2DNE KB2AYU	36 35 34 34	WD8ISK WB5IGF WA2ONK AA2UK	13 11 10 10	WA1OUB WB2DNE WA1MBA K2UOP/8	15 15 15 15
Multioperat	or										
50 MHz WA7JTM -L KB5IUA -L WØUC NC7K AA9D WB7VVD W7GZ WB7TDI -L N2WK WBØGGM	168 149 138 134 131 129 128 127 126 119	144 MHz N8FMD K3MQH -L K3YTL N2WK W3CCX W4IY AA9D WBØGGM WØUC WD3R/2	70 64 62 61 60 60 58 56 56	222 MHz N2WK K3MQH -L N8FMD AA9D W3CCX KB2DMK -L W4IY W2SZ/1 K3YTL WW8M	45 43 41 41 36 35 33 31 30 26	432 MHz K3MQH -L N2WK AA9D N8FMD K3YTL W3CCX W2SZ/1 KB2DMK -L K3LNZ/8 W4IY	50 45 45 44 41 40 37 37 37 37	902 MHz N2WK W2SZ/1 K3YTL W3CCX AA9D N8FMD WW8M K3LNZ/8 W4IY WD3R/2	28 23 17 16 14 14 11 11 9	1296 MHz N2WK W2SZ/1 N8FMD W3CCX W3IP W4IY K3YTL WW8M AA9D WA6KLK -L	28 27 21 20 19 16 16 16
-L denotes L	imited	Multioperator									



Greg, KJ6KO, seems to have found a great site to win this contest from Sacramento Valley.



VHF Contesting is alive and well in Brazil! Here's Gio, PY2CDS's, antenna farm in São Paulo.

their members upgrade their stations with gear for the various microwave bands, as well as coming up with some laser rigs. Wayne relates, "We came really close to them last year, and didn't know if we were just lucky or what. So this year we pulled out all the stops. What made the difference? Well, we had a lot more transverters working this year, and had made a big effort to put together stations for 10 GHz and laser. I also can't thank the Brockport ARK enough. A lot of their members were active this year, and their close proximity to my location gave me a lot more QSOs than in previous years." Their win is still more impressive when you consider they operated from a home station, instead of a mountaintop, à la W2SZ.

Speaking of tremendous efforts, how about the K3MQH crew? As one dynasty may be ending, another one may be beginning! Their 510k point score not only blew away everyone else in the Limited Multioperator class, but 7 out of the top 10 full Multioperator efforts. Wow! They've certainly taken their operation a quantum leap ahead of the rest of the field, and we congratulate them for making all that hard work and effort pay off so handsomely.

Normally, June means springtime weather. Unless you were in Colorado, where Saturday brought a couple of inches of snow. A front moved through the Midwest that brought a lot of rain, but no tropo with it. For most of us, though, it was the perfect excuse to get out of doors and either go mountaintopping or roving across the countryside. Scott, AA6U, and Jeff, KD6DHB, had an excellent weekend adventure—check out their story, "Roving Contest Adventure: 16 Grid Squares in 30 Hours," in this issue. Of course, the endless discussion with rovers is strategy—do you mount big operations from a couple of spots, or do you try to activate as many grids as you can? John, K9JK, and Chad, WE9V, had the best of both worlds! They tell us, "We were lucky enough to have 6-meter 'openings' coincide with a few of the less 'urban' grids where we stopped. This was a big help in getting good multiplier counts." Their score was only slightly smaller than the one posted by Brian, ND3F, who found out first hand what it's like to activate 12 grids single-handedly. He relates, "The 1296 pileups still make me smile, and there were several of them. I sure needed a partner! It's very difficult to drive, log, tune/ operate the radios, and turn the antennas, all at the same time. It gets hard to log in the dark, too!"

Whereas the advantage in propagation helped the West Coast scores, it wasn't enough to take the top spot. Jeff, WA2TEO, added to his collection of first-place plaques again this year, topping Joel, WB5IGF, who turned in a superlative effort from Arkansas. All the single operator races were close ones this year.

Of course, it really doesn't matter where you finish in the contest. What really mat-

ters is whether or not you had a good time. Were you on? Who did you work? Are you ready for the next one? The January VHF Sweepstakes will be here before you know it—make sure you have the dates (January 20-22) circled on your calendar!

SOAPBOX

We enjoyed working AD4DG in FM16 off the back of the antenna on 432 (W1QK). I had only one Es QSO, with WB5IGF (N7EII). Tropo propagation was good this year. I worked out to FN02 and FN03 on 144 and finished with 25 grids. The 6-meter Es was missing, but there were some meteor QSOs (W1EJ). This was my first VHF contest since 1979. To me, the activity and results were massive (KA1FJ). Conditions were quite flat for June, but the rovers made up for it by putting extra grids on



Tom, KFØKR, tunes the bands from DM77 for John, NØHAX.

(WA1MBA). There was essentially no Es as far as I could tell (K1FWF). We're especially proud of our score on 1296 (WB2IEY). The bands had to be in good shape for me to work 19 grids on 144, and 4 on 222 (NB2T). 6 meters was very disappointing this time, with poor propagation and little activity (N2QHS). I really appreciated the efforts of the rovers, as well as the ops in unpopulated grids (WB2VVV). A lot of hikers on the Appalachian and Blue Trails saw us lugging the gear and asked a lot of questions. At one point we tired of this, and told some of them that we were tracking bears! (NG2R). This was my first contest. It was a lot of fun and a good way to work new grid squares. I turned 8 years old two days after the contest! (KB2TNY). Conditions were not too good, except for some 6-meter Es on Saturday (WA2BPE). I worked 14 grids with 10 W, yet couldn't work anyone in my own grid! (W2WGL). The weather was bad, the conditions were bad, but it's still a

Region Lead	lers												
Northeast Regio	n	Southeast	Region		Central Re	gion		Midwest Reg	gion		West Coas	t Region	
(New England, H and Atlantic Divi Maritime and Qu Sections)	isions;	(Delta, Roa Southeast	anoke and ern Divisio	ens)	(Central ar Divisions;			(Dakota, Mic Mountain an Divisions; N Saskatchew	d West Gu lanitoba an	lf d	(Pacific, N Southwest Alberta, Bi and NWT/\	ern Divisio itish Colu	ons; mbia
WA2TEO 304, K1RZ 231, NW3C 138, AA2UK 134, N1DPM 122,	264 S 128 S 549 S	WB5IGF WD8ISK K2UOP/8 AA4ZZ KC4UCE	240,835 206,780 116,256 99,651 62,328	S S S S	KE8FD W8ULC WZ8D N9MKC WA4GPM	165,393 118,534 92,225 83,700 73,386	S S S S	KN5S NØLL W5KFT (WB5VZL, N5HHS W5UWB	126,940 110,986 91,675 op) 78,604 66,906	s s s s	NU6S K6KLY AA7A WB6AAG KF6CU	66,810 63,360 60,788 56,595 50,165	S S S S S
NM1K 65, AF1T 13, NB2T 3,	565 Q 504 Q 000 Q 680 Q 830 Q	N8TLZ/4 WA4IOB KS4RX KE4BM KE4OAD	43,400 10,458 7,830 2,376 913	aaaaa	N9CIQ KB8QBM N8AXA W9SZ W9UD	13,870 8,281 7,242 1,856 817	a a a a	NN9K/Ø KB5ZFO WA2VOI N7SFT W8CM	40,228 10,730 10,098 1,560 1,170	aaaaa	N3EG KD6RMS AB6QW AC6CM N7WNC	18,172 5,880 1,978 1,032 480	a a a a a
N2WK 1,258, W2SZ/1 1,122, W3CCX 482, K3YTL 404, WD3R/2 296,	421 M 589 M 352 M	N8FMD W4IY K3LNZ/8 WA4VCC W4HAW	489,328 360,126 143,704 61,204 3,648	M M M M	AA9D WW8M WØUC N8KOL	538,772 204,414 190,931 34,960	M M M M	WBØGGM KDØDW KØVM WB7VLJ WB9CEP	171,363 110,840 46,292 29,440 27,720	M M M M	KE6TCY WB7VVD AF6O W6TRW NC7K	100,368 89,820 84,943 70,286 69,420	M M M M
	065 L	W4AQL WA4CQG W4CMA WT4C W5GAD	136,400 52,288 30,048 29,298 25,016	L L L L	N9LAG N9KZJ N8HNS KA8HHU W9YB	67,536 10,143 8,635 5,670 4,320	L L L L	KB5IUA K1LL/Ø W1XE KC7LHJ N8RQR	134,375 43,848 43,173 12,986 11,400	L L L L	WA6TBO WA7JTM WB7TDI WA6KLK WN6W	123,816 103,222 89,775 60,580 56,980	L L L L
AA7QZ/2 4, N2UIO 2, AA2IZ 1,	460 R 072 R 486 R 934 R 881 R	ND3F AD4DY KC4ZRH WA4UCI N3TUM	21,122 4,601 3,145 3,089 2,040	R R R R	К9ЈК	20,557	R	VE4ZK KØDAS N7MLD KØTLM N5NIQ	9,568 7,714 5,474 5,302 3,980	R R R R	K6LMN NGØX AA6U W7HAH N6IPE	19,737 13,453 12,493 7,366 4,251	R R R R

Plaque Winners									
Single Ope	erator			Multioperator					
Position	Winner	Score	Donor	Position	Winner	Score	Donor		
1st 2nd 3rd 4th 5th 6th 7th 8th 9th	WA2TEO WB5IGF K1RZ WD8ISK KE8FD NW3C AA2UK KN5S N1DPM	304,848 240,835 231,264 206,780 165,393 138,128 134,549 126,940 122,612	Mt Greylock Expeditionary Force, W2SZ/1 Bald Knob VHF Contest Group, AA9D Kenwood USA Corporation Midwest VHF/UHF Society Delaware Valley VHF Society Ed Parsons, K1TR Eastern VHF/UHF Society Wellesley ARS, Mt Equinox Contest Crew KS VHF/UHF OPS Annual on the Hill Get Together	1st 2nd 3rd 4th 5th 6th 7th 8th 9th	N2WK W2SZ/1 AA9D N8FMD W3CCX K3YTL W4IY WD3R/2 WW8M	1,258,560 1,122,421 538,772 489,328 482,589 404,352 360,126 296,132 204,414	Randy Stegemeyer, W7HR N2LIV, N2GHR, N2BFJ Contest Team Kenwood Employees Radio Club, WD6DJY Mt Airy VHF Club KS VHF/UHF OPS Annual on the Hill Get Together Rochester VHF Group Northern Lights Radio Society & WØUC Flagpole Knob Contest Group, W4IY Schenectady ARA, K2AE		
10th	W8ULC	118,534	South Mountain Contest Team, K3MQH	10th	WB2IEY	198,555	In Memory of Sid Krauss, WA2VNK		
QRP Porta	ıble			Limited M	ultioperator		•		
Position	Winner	Score	Donor	Position	Winner	Score	Donor		
1st 2nd 3rd 4th 5th	KH6CP/1 NM1K N8TLZ/4 NN9K/Ø N3EG	72,565 65,504 43,400 40,228 18,172	K2RIW, Dick & K2OVS, Jay Peter Putman, KT2B Long Island Mobile ARC West Coast VHFer KS VHF/UHF OPs Annual on the Hill Get Together	1st 2nd 3rd 4th 5th	K3MQH KB2DMK W4AQL N2DSY KB5IUA	510,384 157,065 136,400 134,583 134,375	W3EP/K9AKS/W9IP Kenwood USA Corporation Kenwood USA Corporation WA2TEO, W2GKR, W2GKO, KA1FVG Big Mountain ARC		
Rover				Marine Mo	bile				
Position 1st 2nd 3rd 4th 5th	Winner ND3F K9JK K6LMN NGØX AA6U	Score 21,122 20,557 19,737 13,453 12,493	Donor WSSZ/1, In Memory of Dick Goodman, WB1HIH Wayne King, N2WK Western States Weak Signal Soceity	Position 1st DX Single Position 1st DX Multio Position 1st	Winner XE2/NH6ZI	Score 120 Score 4,488 Score 2,210	Donor Wayne T. Yoshida, KH6WZ Donor Bill Tynan, W3XO Donor Robert J. Carpenter, W3OTC		

great contest (KB2DMK). I wish I'd spent more time operating Saturday night, which is probably when all the good propagation occurred (NK8Q). We had forgotten how miserable it is to tear down everything in a driving rainstorm! (K3YTL). There wasn't much Es on 6, but the humid weather kept line noise low so I could hear all the scatter for a change (K3ZO). Conditions were good on 144/220/432, but it was a bummer on 6 meters again! (NW3C). The highlight was being called by W8VT/m running CW generated by his PTT button from southern Georgia. It's folks like him who make the contest enjoyable (KB4FAI). No tropo, not much Es, but it was still a lot of fun! (WA4CQG). A slow-moving cold front that stalled over Kentucky left the bands almost dead Sunday (AD4ZW). Other than the searing heat, the torrential downpours, the high winds, the pea-sized hail and the thunderstorms, it was a perfect weekend for contesting on the mountain (W4IY). I've seen conditions that were a lot better (KB5VRO). This was my personal best, and I made it from home, too! (N6PYI). This was my first experience operating on 6 meters. What an exciting band, especially during a contest! (K5RHR). I worked a lot of rare grids in northern Nevada (WA5IYX). The band openings seemed to start toward the south, and then rotate counter-clockwise to W6 (WA5QCP). This was our first VHF contest since adding 6 meters, and we weren't disappointed, despite a modest antenna. Best of all was the friendliness, courtesy, and enthusiasm of the participants—a fine introduction to contesting for my nine-year-old son (AC6EN). Excellent 6-meter conditions easily allowed me to eclipse all my previous efforts (WB6AAG). 6-meters was open for most of the contest (WA6VQZ). The last hour of the contest was fantastic! I'm glad I didn't pack up early and

go home (NU6S). This was the first contest I ever participated in. It was great working some different grid squares (KE6EFD). I heard some weak stations from northern California on 10 GHz, but wasn't able to make a 2-way contact (W6OYJ). Several 6-meter openings made it the best contest in years! (W6PFF). Mountaintop contesting with a cold is hell! (N7STU). Six meters was open to somewhere all day Sunday—even with limited operating time, I still managed to snag over 90 grids (WA6MGZ). The band was open all weekend with some good DX contacts. We had an Es opening on 2 meters to Texas that netted me some new ing on 2 meters to Texas that netted me some new grid squares (WB70HF). This was one of the best 6-meter openings in years! (WA6IJZ). We couldn't have planned it any better—a great Es opening right in the middle of the contest! (N7GJD). In the 2-meter opening to Texas Sunday morning, I worked 20 stations in three grids (WA7ITM). Our effort this year was hampered by winds gusting to 70 or 80 mph with lightning bolts as big as houses (NU7Z). I thought I'd just give out a few points, so I started logging on paper, then it got so furious I had to fire up the computer (N7ML). Until the opening Sunday afternoon, it was ugly, hard work (WA7PDC). I ended up stomping my call sign into a snowdrift Saturday for the want of something to do (N7WVZ). A real surprise was hearing W2SZ coming through from the northeast (K7ICW). I operated less than six hours, but got the best of the 6-meter opening! (WA7PIB). I was so busy working the southern California stations, I almost didn't work any locals! (KX7L). We had some fair enhancement on 2 meters to the east Sunday evening (KU8U). Nearly everything I heard was within 300 miles (W1FEZ) The weather was uncooperative, as a front passed through, bringing rain but no spectacular band openings. Then after the front went through, the temperature and the band conditions both went

down (W9SZ). Band conditions were terrible, and it rained the entire contest (WB9GKA). This was my second contest, and I suggest that all hams try it (N9RZY). I was having so much fun, I wished the contest would last another day (N9CIQ). Don't ever start antenna work just prior to a contest (WA9LZM). Having 6 meters open throughout most of the contest always makes for a nice touch (KDØHE). The bands weren't great, but the weather was! (NØNGZ). I had a nice opening here in Kansas (NØFFO). I enjoyed the opening to the west on 6 meters Sunday evening (AJØK). We worked many new grids in XE, and topped it off with W6JKV/HR6 for a new country (W1XE). I didn't work a single W4 on 6 meters! (K1LL). I never knew there were so many mountainous state parks! It was cool being a rover, even with only FM (N2KJM). We had a brief opening to W4 and W5 that lasted about 40 minutes (VE3TMG). Conditions were very poor, but I still got two new grids out of it (VE3VHB). The two Es openings on Saturday and Sunday were fantastic-the W6s were 40 dB over S9 for long periods. I thought I was rare DX, as there seemed to be two or three guys calling me after each QSO (VE7CA). I worked a lot of new calls on FM simplex. This is good for those folks who can't afford weak-signal gear (N3KTU). If 6 meters had not been active, I would have fallen asleep, driving from grid to grid (WRØI).

Feedback, 1994 ARRL June VHF QSO Party

In Western Massachusetts, K1FWF was the 50 MHz winner, and WA1MBA was the 3.4 GHz winner.

The operators of W1NY were W1KK, N1s KBY,RIL, and NC1I.

Scores

Each line score lists call sign, score, stations worked, multipliers, hours, number of grids activated (if Rover), and bands (A= 50 MHz, B = 144 MHz, C = 222 MHz, D = 432 MHz, B = 902 MHz, E = 1296 MHz, F = 2304 MHz, I = 10 GHz). Call signs of division leaders and band indicators are listed in **boldface** type. New divisional records are indicated with an *.

1	Rhode Island	K3EW 10,626 322 33 S B	N2QXF 2,028 78 26 S AB
	KM1X 27,144 361 72 S ABD	WM2Y 7,392 180 32 S ABCD	N2UAH 1,640 82 20 S A
Connecticut	K1TPK 3,978 153 26 S AB	KA2AUQ 5,616 193 27 S BD	N2VLA 1,008 112 9 S B
WA2TEO 304,848 952 232 S ABCD9EF	AI1K 2,187 77 27 S ABD	WA2KPD 5,239 142 31 S ABC	WB2RQX 460 46 10 S B
W3EP/1 51,993 412 109 S ABDE	W1OP (K1s DS,PLX,KZ1K,N1s BAQ,RHS,ops)	WB2HKR 2,448 107 18 S BD	WA2BKN 360 60 6 S B
K1FO 41,752 296 68 S CDE	19,082 252 58 M ABCD9E	N2SQW 2,400 93 24 S ABD	N2WZB 320 64 5 S B
K1ZZ 17,169 291 59 S AB	K1MUJ (KA1ZNZ,WA1HYN,ops)	W2KHQ 2,328 69 24 S BDE	N2TBO 304 76 4 S B
K1EM 14,570 163 62 S ABCDE	23,751 243 63 L BCDE	KG2H 2,187 81 27 S AB	KB2SFS 140 35 4 S B
AA1AK 10,922 254 43 S AB	N1EYE (+NQ1F)	K2RI 1,134 89 9 S BCD	WD3R/2 (+K2BJG,KB2LHH,N2s BCC,EWV,HMM,
N1NQD 7,896 166 42 S ABD	3,400 103 25 L BD	K2UF 871 67 13 S B	WM,WA2FCF,WB2UFF)
W1QJL 6,232 130 38 S ABCD	NØXPI/1 (+NØXKU)	N2ZOE 792 99 8 S B	296,132 1149 202 M ABCD9EF
KB1GW 3,243 141 23 S A	276 21 12 L ABD	WB2OEE 780 65 12 S B	N2DSY (+KF2XK,N2s MFD,PBY,QBR,RFA,
W1XX 2,898 126 23 S A	Vermont	KB2RKY 720 113 6 S BD	UOJ,ZVS,NO2T,WA2CRF,W6TER)
K1WVX 2,403 77 27 S ABCD		KA2MCU 705 26 15 S ABCD9EFI N2YQW 300 23 12 S ABD	134,583 965 113 L ABCD
W1WHL 1,872 78 24 S A	W1AIM 29,516 240 94 S ABCD9E	N2YQW 300 23 12 S ABD N2JJE 168 28 6 S AB	N2PPV (+N2OUM) 8,316 219 33 L ABD
WA1GTP 1,155 54 21 S ABC	WB1GQR (WB2JSJ,op)	AA2CW 155 27 5 S BCD	NX2Q (+N2JVP.W2OZU)
N1UXA 408 51 8 S B	13,750 221 50 S ABCD	N2PEQ 88 22 4 S B	7,785 152 45 L ABDE
N1QGY 24 7 3 S BD 4	KA1FJ 7,614 119 54 S ABD	WB2ECL 30 10 3 S B	N3KFN (+KB2RJK)
N1OFO 16 8 2 S B NM1K 65.504 454 92 Q ABCD9EF	KA1DLK 2,889 92 27 S BD	KA2EXB 21 7 3 S AB	2,700 135 20 L B
	K1LPS 1,484 42 28 S ABD9E K1CLN 836 40 19 S ABD	WA2FME 8 4 2 S AB	NG2R (N2s HSU,LVI,NC2X,WA2YIN, ops)
N1BAH 186 31 6 Q AB		KB2TYC 1 1 1 S B	540 36 15 L B
W1QK (+KA1SYG,N1s OFZ,NIQ) 85,212 652 108 L ABCD	KH6CP/1 72,565 352 115 Q ABCD9EFGHIJ W1TKZ (KC1US,N1s FXG,HXO,NT1s L,M,	WB2IEY (KD2IX,N2s CWV,DVQ,FMC,GCZ,	040 00 10 E B
65,212 652 106 L ABCU	WO1Z,WZ1V,ops)	GDY,HTT,OLW,WA2LVY,WB2s NHC,VVS,	Southern New Jersey
Eastern Massachusetts	90.742 593 118 M ABCD9EFGHIJ	VE3IEY.ops)	AA2UK 134,549 572 157 S ABCD9EF
N1BWT 16.408 221 56 S ABCD9EI	90,742 393 110 M ADOD9ET GITTO	198,555 947 155 M ABCD9EI	KB2AYU 78,480 475 120 S ABDE
N7EIJ 14.300 230 52 S ABD	Western Massachusetts	AB2I (+AB2J,K2DNR,KC2JS,N2s BZP,FYR,	WA2ONK 22.446 247 58 S BD9E
KX1C 12.688 180 52 S ABCD9E	N1DPM 122.612 484 151 S ABCD9EFG	W2AWX,WA2IID,WB2SSS,WN2Y)	K2YY 20,022 210 71 S ABCDE
K1GVM 6,720 133 42 S ABDE	WA1MBA 72.030 436 98 S BD9EFGHI	96,921 650 121 M ABCDEFIP	N2SCJ 18,700 266 55 S ABCD
WA1MTI 6,201 130 39 S ABD	N1LZC 18,980 290 52 S ABCD	N2VOT (+KB2RWW,KF2YC,N2s EK,NCQ,	W2EIF 12,740 158 52 S ABCD9E
N1ABY 2,730 130 21 S AB	NC1I 13,330 215 31 S D	WCY,ZKD,WA2DEK)	K2GAL 12,137 229 53 S B
KD1KJ 2.208 80 24 S BD	KD1WO 13.207 258 47 S ABD	49,600 573 64 L ABCD	N2OML 5,610 113 34 S BDE
KA1VY 1.782 68 22 S ABD	N1FUS 12,728 242 43 S ABCD	KA2VJV (+AJ1J,N2s KEE,KPM,OAH,OAM,	KB2RYK 2,280 76 30 S A
WA10FR 1,102 50 19 S ABDE	NA1W 10.404 110 51 S BCD9EFG	PSR,QLD,QVW,TFO,WKC)	K2ZA 1,122 66 17 S B
WA1LXP 196 28 7 S A	AC1T 10.350 181 45 S ABD	37,772 479 76 L ABD	N2UNH 884 62 13 S ABD
WA1TTE 18 6 3 Q B	WA1ZUH 3,379 98 31 S ABD	KF2MR (+N2QIP)	KD2KS 600 54 10 S BD
KA1EKR (+KA1CLV,WA1UDH)	N1MIA 2,793 133 21 S A	6,900 195 25 L ABCD	N2VPN 282 47 6 S B
16,302 233 57 L ABCD	N1TGA 1,572 115 12 S BD	N2RKC (+KB2QNP)	N2MPU 272 34 8 S B
•• •	N1RSY 1,488 124 12 S B	4,752 146 27 L ABCD	WA2YSW 108 14 6 S BD
Maine	N1QKR 1,431 133 9 S BD	K2AE (KA2EXB,KB2s SRI,UKV,UKW,n2s SQO,	K2AA (KA2GSL,KF2YX,N2FY,W2ORA,
N1DGF 1,820 91 20 S B	N1TOS 836 76 11 S AB	TJQ,WZ2X,ops)	WA2CVJ,ops)
WB1APD 437 23 19 S AB	K5ZD 583 53 11 S B	2,448 121 17 L ABCD	35,364 340 84 L ABCD KB2TNY (+WY2X)
KQ1V 273 21 13 S B	K1JG 420 35 12 S B	NYC-Long Island	1.064 56 19 L B
KA1GTR 154 11 7 S D	N1SVO 270 30 9 S AB		1,004 56 19 L B
New Hempehire	K1II 341 30 11 Q ABC	N2LIV 51,548 336 98 S ABCD9E N2QHS 4.200 112 30 S ABD	Western New York
New Hampshire	W2SZ/1 (K1DH,KA1PRT,WA1s UGE,ZMS,	N2ZRC 1.500 108 12 S BD	K2AN 58.086 319 126 S ABCD9EFG
WA1OUB 67,397 499 121 S ABE	K2TR,KB2MR,KE2TP,N2s BNY,HPA,NQI,	W2AEE (N2YGN,op)	WA2BPE 33,277 236 107 S ABCD
W1EJ 34,506 334 81 S ABCD9E	NZI,XRE,YCA,YZO,W2ARQ,WA2s AAU,SCA,	1,404 105 12 S BD	WA2AEY 16,728 204 82 S AB
N1HO 19,468 255 62 S ABD	TIF,KMY,WS2B,WG3I,AK4L,WA8USA,ops) 1,122,421 2098 331 M ABCD9EFGHIJ	N2PRL 1.008 72 14 S B	K2JIQ 4,066 107 38 S B
AC1J 13,260 211 51 S ABCD	1,122,421 2098 331 M ABCD9EFGHIJ K1FWF (+NET)	NB2T 3,680 140 23 Q BC	W2WGL 3,672 79 36 S BD
WA1T 9,600 174 48 S ABD	12.879 243 53 L AB	AA2DR (KB2IRO,N2s KYM,QPA,WA2WAG,ops)	AA2GF 2,686 67 34 S BD
WA1NIE 3,348 82 31 S ABEFGI WW1Z 1,725 67 23 S ABCD	12,078 240 30 L AD	11,200 162 56 M ABCD	N2YJX 2,604 93 28 S B
	•		N2RHL 1,909 83 23 S B
N1RIK 36 12 3 S B AF1T 13,000 175 52 Q ABCD9EFGI	2	Northern New Jersey	K2OEQ 1,568 55 28 S ABD
K1TR (+AE1D,N1AFQ,WB1DSW)	Eastern New York	WB2VVV 64,470 438 105 S ABCD9E	KB2NFS 1,500 92 12 S BCD
106.820 594 140 M ABCD9EF	Eastern New York	WB2WIH 34,431 370 69 S ABCD	N2EZS 684 32 18 S ABCD
WB1FLD (+KA1FYB,N1NUM)	WA2BAH 48,594 375 91 S ABCD9EFI	WB2QOQ 13,202 322 41 S B	KU2A 646 20 19 S BCD9E
23,800 342 56 L ABCD	W3HHN 31,324 283 82 S ABCDE	WA2VYA 8,970 173 46 S ABD	K2JD (AF2K,op)
WA1ZYX (KA1ZMX,N1s BAC,KWF,KWM,NGF,	N2MSS 17,141 213 61 S ABCDE	WA2LTM 4,224 53 24 S EFGI	630 45 14 S AB
NX1G.WA1NHP.ops)	KC2QF 11,024 174 52 S ABD	N2LMU 3,213 144 17 S BD	KF2SJ 420 35 12 S B
9,159 181 43 L ABD			
•			

K5MA 290 58 5 S B	K4AEK 3,822 91 42 S AB	KB5VRO 108 18 6 S B	Santa Clara Valley
N2DEM 247 18 13 S BC AF2K 215 41 5 S BD	KD4YDC 168 24 6 S BD KD4YDA 95 18 5 S BD	Louisiana	NU6S 66,810 412 131 S ABCDE
KA2CDJ 120 11 10 S BC	KC4YNC 36 12 3 S B	N5VVB 12,150 145 81 S ABD	K6KLY 63,360 399 128 S ABCDE KF6CU 50,165 270 127 S ABCDEFI
N2TWI 91 7 7 S ABD9E WA2ZNC 1,830 50 30 Q ABCD	N4UZ 16 8 2 S B WBØQGH (KB4LCN,WA5PSH,ops)	K5CZD 10,507 125 79 S ABD KF5IU 5,332 86 62 S AB	WB6ASR 18,408 191 78 S ABCDE
*N2WK (+AA2SP,WV,K2s DB,OS,KA2s HSK,	819 29 21 M ABCDE	W5GAD (N5UXT,WA9TMC,ops)	AJ6T 17,475 202 75 S ABD KB6NAN 4,242 101 42 S A
RDO,KB2SE,N2s VTB,WVK,WB2QCJ,W2DYY, KD5RO.W9IP)	W4CMA (AD4QR,KC4DDH,KD4HLG,KE4QMD, KA5WZY,ops)	25,016 236 106 L AB N5MYH (+KB5SUI)	W6YLL 3,870 86 45 S A
1,258,560 1823 380 M ABCD9EFGHIJP	30,048 276 96 L ABD	4,032 77 42 L BD	KD6PAO 2,242 118 19 S B KG6AO 1,247 43 29 S AB
KB2DMK (+KB2s PVZ,TIQ,N2s HLT,TPR,	KE4ZTC (+KC4GCK)	Mississippi	KO6CL 1,072 44 16 S ABDE
NQ2O,NS9E) 157,065 646 185 L ABCD	3,132 79 36 L ABD	N5YLS 325 25 13 S B	KD6TWK 170 15 10 S ABD
N2LXD (+AA2GV,KB2s OAZ,MRZ,N3s LBI,RKO)	Kentucky	KB5YDM 108 12 9 S B	WAØQII 120 10 4 S E KE6EFD 4 4 1 S B
67,257 386 141 L ABCD KE2PM (+AA2VD,K2SPO,KB2JAG,KF2ZN,	AD4ZW 44,157 285 123 S ABCD AA4FQ 14,160 139 80 S ABDE	New Mexico	KE6TCY (KB6HRB, KC6UCN, KD6s HMN, QON,
N2s KTU,PBU,PBX,UBM)	KD4SZJ 3,520 72 40 S ABD	KN5S 126,940 577 220 S AB	KE6s KMM,LYT,N6s JXL,PLE,VYT,ZGY,ops) 100,368 551 144 M ABCDE
55,308 362 132 L ABCD KB2UJG (K2DN,KB2s CCL,FAV,N2s MRE,MSF,	WA4FVQ 1,736 54 31 S ABD	NK5F 47,464 346 136 S ABD	AA6PA (+KD6s LI,LHL)
NRV,ops) 592 28 16 L BC	North Carolina	K5RHR 12,936 147 77 S ABCD K5MAT 5,656 79 56 S ABCD	8,321 117 53 M ABCDEF
	AA4ZZ 99,651 480 177 S ABCD	W5IXR 5,264 87 56 S ABCD	WA6YDI (+AA6s AH,EG,KE6HUD,NI6G,WA6LUT) 51,171 362 111 L ABCD
3	KH2CY 1,846 61 26 S BCD N4PPH 938 67 14 S B	KB5ZSK 4,644 91 43 S ABCD	
Delaware	KE4PNT 34 17 2 S B	WB9CEP (+N5JDY,WB9ERE) 27,720 248 105 M ABCDE	San Diego
KB3QM 47,538 313 114 S ABCDE	WA4IOB 10,458 132 63 Q ABCDE	•	W6OYJ 4,095 75 39 S ABCDI W6PFE 3,135 95 33 S AB
KB3PD 21,909 182 67 S BCDE	W4AQL (NZ3I,AB4RU,KS4IS,WA4KXY,WQ4V, AE6E,N9KHC,NX9O,KØDI,ops)	North Texas	WB6AXW 1,680 59 24 S ABCD
KA3KHZ 4,234 146 29 S B WA3BZT 3,948 141 28 S B	136,400 585 200 L ABCD	WD5K 33,517 277 121 S A N5UD 10,336 136 76 S A	WAGTBO (+KB5MY,NF6L)
N3KSE 3,660 104 30 S ABD	WT4C (+KN4QE,N4ZWE,NG4C)	KB5OAI 8,128 119 64 S ABCD	123,816 638 168 L ABCD N7CW/6 (+KD6QK)
Eastern Pennsylvania	29,298 245 114 L ABD KD4OWS (+KO4QU)	AA5C 5,104 74 58 S ABCDE KY5N 2,451 57 43 S AB	55,573 467 119 L AB
K3GNC 47,430 345 93 S ABCDE	3,036 63 46 L ABC	KF5DO 2,001 69 29 S B	W6RDF (KD6S EFQ,RZX,KO6ET,N6XIV,
KB3IB 35,991 235 93 S ABCD9E	Northern Florida	KC5EPL 637 48 13 S BD	KBØLQC,ops) 48,783 388 101 L ABCD
N3LKI 5,376 94 42 S BD N3JNX 4,418 82 47 S ABD	KQ4PI 15,876 160 81 S ABCDE	W8CM 1,170 39 30 Q A	WB6DTA (+K6DYD)
N3JNX 4,418 82 47 S ABD WB3ESS 4,264 82 26 S D	N4TWX 6,608 109 56 S ABD	Oklahoma	48,764 313 146 L ABCD
WB3LNZ 4,165 83 35 S ABCDE	AA4NA 3,159 71 27 S BDE	WD5AGO 8,016 100 48 S BDE	San Francisco
AA3JW 4,136 82 44 S ABC NK8Q/3 3,120 120 26 S B	South Carolina	K5SW 2,997 55 37 S ABCDE KA5WRG 2,646 58 42 S ABD	WB6CVJ 6,448 150 31 S BCD
N3FJA 2,716 88 28 S BD	KP4XS 7,980 133 60 S A	·	WA8LLY 4,056 77 52 S ABD AB6QW 1,978 82 23 Q BD
N3BDA 1,600 75 20 S ABC	WB2WEO 361 19 19 S AB	South Texas	WA6KLK (+WD6HDY)
N3MYM 1,180 59 20 S A KA3B 896 56 16 S B	WA4VCC (+AA4R,K4MQG) 61,204 341 143 M ABCD	W5KFT (WB5VZL,op) 91,675 468 193 S ABD	60,580 353 130 L ABDE
N3UDU 299 19 13 S ABCD	KD4ZMR (+KD4TCA,KE4JNY)	N5HHS 78,604 445 172 S ABD	WN6W (+KF6ZU) 56,980 404 110 L ABCD
W3UQC 189 21 9 S B	930 60 15 L BD	W5UWB 66,906 411 162 S ABC	
N3IKC 96 12 8 S B N3SQE 30 10 3 S B	Southern Florida	KC5CCT 34,748 272 119 S ABD KC5FMT 20,884 217 92 S ABD	San Joaquin Valley
N3TLJ 18 6 3 S B	WD4MGB 14,014 173 77 S ABD	KC5FP 16,296 189 84 S ABCD	N6PYI 37,323 266 117 S ABCDE K6YK 22,102 221 86 S ABCD
N3UMO 640 40 16 Q B W3CCX (WA1YHO,WB2YEH,K3ESJ,N3s DQZ,	K2RTH 9,234 136 57 S ABCDE WB2QLP 8,928 131 62 S ABD	KK5DK 15,355 164 83 S ABD9E KC5LCK 10,200 130 68 S ABD9E	WJ6T 15,860 205 65 S ABD
EVV,EXA,GSA,ITT,NGE,OZO,W3GAD,	K4SC 3,876 76 51 S AB	WA5IYX 5,828 94 62 S A	N7STU 12,540 162 76 S ABD KB6IGC 8,487 112 69 S ABC
WA3s AXV,JUF,NUF,YUE, WB3s DNI,JYO,ops)	W4OO 880 44 20 S A KD4LXB 90 18 5 S B	KA5PVB 2,050 50 41 S A	KU6A 7,964 126 44 S ABDE
482,589 1260 261 M ABCD9EFGHIJP K3YTL (K2LNS,K3MKZ,KA3s EEO,QKI,ZHT,	KD4LXB 90 18 5 S B W4FNR 21 7 3 S A	KI5X 728 28 26 S A AJ4F 560 40 14 S B	KA6AMD 4,257 79 43 S ABCD
KB3QI,KE3OA,N3s DAP,KAE,MLV,PBH,	W4HAW (WA2STA,WB2FKR,KD4VBI,KE4IEJ,	KK5OA 310 31 10 S B	KD6WVL 2,925 117 25 S B KC6ESL 2,706 55 41 S ABCD
W3DZH,WA3s NVS,YON,WB3s BOT,	WA4HXZ,ops) 3,648 112 32 M ABD	KC5CXU 256 32 8 S B *KB5ZFO 10,730 145 74 Q AB	N5UYI/6 (+KC6QPO,KD6WAZ,N6MTS)
FAA,FKQ,ops) 404,352 1332 234 M ABCD9EF	N4EJW (+N4EJV)	*KB5ZFO 10,730 145 74 Q AB KB5IUA (+K5HKX,WB5N,KZ8E)	66,062 376 134 M ABCDEI
W3HZU (KA3LJL,N3s DEJ,JDQ,NBT,RBT,	17,952 198 88 L ABD	134,375 574 215 L ABCD	Sacramento Valley
VOO,WB3CQN,WS3C,ops) 38,976 380 87 M ABD	KE4MPV (+KB4LCR) 1,350 54 25 L A	N8RQR (+KE4MGK) 11,400 142 76 L ABCD	KJ6KO 28,303 270 83 S ABCD
N3ADC (+N3RSE)	_		N6KBX 26,100 261 100 S AB KA6VQV 11,550 160 66 S ABCD
15,022 188 58 M ABCDE K3MQH	Tennessee WB4JGG 33,390 256 105 S ABCD	West Texas N5RZ 48,144 338 136 S ABCD	WB50MF 8,815 154 41 S ABCD
(K3s IXD,JFL,LYW,RA,KF3P, N3s EYB,HIH,KTV,WF3T,ops)	KC4QWZ 24,100 178 100 S ABCD	N5RZ 48,144 338 136 S ABCD WA5QCP 3,484 67 52 S AB	W6RCW 7,375 121 59 S ABD
510,384 1643 248 L ABCD	KE4JLE 4,700 100 47 S AB	KB5RQV 3,388 77 44 S A	KC6ZWT 6,075 172 27 S BD KE6OBI 2,862 106 27 S B
N3LJK (+K3YWY) 198 11 6 L E	N4OYS 2,523 57 29 S ABCD9E AD4F 147 21 7 S B	6	KE6DPV 2,444 80 26 S ABD
	KD4HIK 50 8 5 S BD		KD6VNQ 1,824 96 19 S B K6AAW 1,625 65 25 S B
Maryland-DC	KE4OAD 913 71 11 Q BD AB4UP (+AB4KK,WA4AUX)	East Bay	KA6NBC (+WA5YWC,KC6TEU,KE6IKU)
K1RZ 231,264 756 219 S ABCD9E WB2DNE 109,701 497 153 S ABCDE	9,198 115 73 L ABD	WA6LHD 2,856 102 28 S B WB6ETY 78 12 6 S BD	62,640 432 116 M ABCDE
W3ZZ 90,288 424 144 S ABCD9E	Virginia	W6BB (KC6YEY,KD6s CYZ,GHG, LDA,ops)	KN6WY (KE6s ADE, JDS, W6JEX, WD6GYU, ops) 39,552 301 96 M ABCDE
K3ZO 67,467 523 129 S AB WA4VHF 14.388 124 44 S DEF	KC4UCE 62,328 376 159 S ABD	7,208 159 34 L ABCD	
KEØYG/3 5,957 125 37 S ABD	N4HB 53,500 327 107 S ABCD9E	Los Angeles	7
W6AXX 2,783 121 23 S B	N4MM 37,240 343 95 S ABD WB8WRY 35,433 307 93 S ABCD	N6KN 47,232 341 128 S ABCD	Arizona
KA3ZLS 2,052 114 18 S B K3TEZ 1,180 59 20 S B	WB8WRY 35,433 307 93 S ABCD K9OYD/4 24,920 180 89 S ABCD9E	N7WLS 34,980 267 106 S ABCD K9AKS 31,108 308 101 S AB	AA7A 60,788 358 167 S ABD
WA3GYW 338 26 13 S AB	K4QIF 24,900 221 75 S BDE	K8BUW 12,489 158 69 S ABDE	KE7GH 47,854 322 142 S ABDE WA6MGZ 23,650 194 110 S ABDE
W3TMZ 3 1 1 S E K1TMW/3 125 25 5 Q B	N4KWX 21,725 200 79 S ABCDE AD4DG 16,046 181 71 S ABD	KJ6ZH 9,882 142 61 S ABCD	KC7MJ 19,885 205 97 S AB
W3IP (+K3YDX,KD3YU,N3s CBJ,FNE,OES,	KD4UPF 14,016 172 64 S ABD	KF6HI 9,246 134 69 S AB KE6AXJ 1,606 114 11 S BD	N7BUP 15,756 156 101 S AB
WG3E,WB6VGI) 124.124 581 154 M ABCD9EFI	KN4SM 11,664 140 72 S ABD KD4EAO 10,075 121 65 S ABDE	KM6JV 1,316 80 14 S BD	WB4LDS 15,640 156 92 S ABCDE WB7OHF 15,470 169 85 S ABCD
124,124 581 154 M ABCD9EFI NV3Z (+N3s AUQ,REQ,NA3T)	N4MW 9,280 106 58 S ABCD9E	KE6UBX 715 45 11 S BD KK6BY 540 25 20 S ABD	W9SE/7 14,880 160 93 S A
12,880 228 46 L BD	KDØXX 6,985 127 55 S A	KE6JLF 200 18 10 S BC	K1SC 10,455 123 85 S AB N7QJP 9,585 127 71 S ABD
Western Pennsylvania	KB4DFK 2,375 44 25 S DE	N6RVC 154 22 7 S B AC6CM 1,032 40 24 Q ACD	WAØKDS 6,195 105 59 S A
NW3C 138,128 570 194 S ABCD	K2EVW 1,272 53 24 S B	W6TRW (WB2DRH, KB6TRJ, KD6s DYK, IGI,	KF7JS 5,220 87 60 S AB WA6IJZ/7 2,310 55 42 S A
KA3SDP 15,232 176 68 S ABD NO3I 13,920 203 58 S BD	WA4OVW 1,144 38 26 S ABD WB4NTV 736 28 23 S ABD	PRO,WYQ,KE6s JFT,MJU,SNF,KO6MZ,	N7GJD 1,683 51 33 S A
AA3GM 6,264 103 54 S ABD	N4YKD 720 34 18 S ABCD	N6ZAY,WA6MPF,ops) 70,286 493 113 M ABCDE	WA9TKK 171 19 9 S B
KD3D 1,450 58 25 S B	K4ME 615 41 15 S B KC4UAO 297 33 9 S AB	KA3DSE (+N6OPR)	KC7DVF 48 12 3 S BD WB7VVD (WB5LCQ,KB7VCO,KC7s AED,
W3HDH 1,352 52 26 S A WA3CSP 1,056 44 24 S A	*N8TLZ/4 43,400 248 124 Q ABCD9E	52,496 335 136 M ABCDE W6GAA (KB6LJO,WA6BIL,WB6JCD,ops)	AZC,ops) 89,820 434 180 M ABCDEFIP
W3KJM 594 33 18 S A	KS4RX 7,830 132 45 Q ABCD	21,597 225 69 M ABCDE	W7GZ (+KB7CI) 51,150 316 155 M ABCDEIJ
W8IJ 80 10 8 S AB K3UA 18 6 3 S AB	W4IY (+N1TXI,W2WCH,AC4XT,K4HWG,KA4s CKI, RRU,KD4s NNI,VSK,KJ4VG,KO4FM,WB4s NFS,	AC6EN (+KE6GVQ)	WA7JTM (+N7AMA)
WBØIWG 9 3 3 S AB	RMJ,WD4s AIR,KXB,KB7RLA,K8EI, WAØDYJ)	2,496 86 26 L ABCD AC6IO (+KE6s JKT,LHL,KO6ON)	103,222 493 202 L ABCD
KB3AFT 26 13 2 Q B	360,126 1120 247 M ABCD9EI KC4YHI (+KA3SWK,WA3ENK,AD4SY,KC4s YMB,	1,938 48 38 L ABCD	Eastern Washington
4	WQC,KD4USY,KE4s NAT,VLC,)	Orange	W7PQE 7,865 121 65 S AB
·	8,680 137 56 L ABD	WA6FIT 40,386 306 127 S ABCDE	KB7VPB 238 17 14 S A AB7IZ 160 20 8 S B
Alabama	5	WA6TMJ 31,106 302 103 S A	NU7Z (+KC7CP,N7s AUV,BNJ)
KA2DRH 60,236 313 148 S ABCDE N4ION 8,580 123 60 S ABD		KD6UIH 18,432 198 72 S ABD KG6EG 7,524 165 36 S BD	5,700 78 50 M ABCDGI
KB4FAI 2,772 99 28 S B	Arkansas	KI6FF 4,158 154 27 S B	KB7UWC (+W7FHI) 17,286 175 86 L ABD9
KD4PEE 1,980 60 33 S A KD4ZO 1,334 49 23 S ABD	WB5IGF 240,835 637 245 S ABCD9EFGH N5HSF 3,872 88 44 S A	KC6UIX 1,241 73 17 S B KD6NIM 945 35 27 S A	
KD4OIG 1,247 43 29 S AB	KE9QT (EM35)	KE6HGV 333 31 9 S BD	Idaho KB7FUV 10,564 139 76 S.AB
KD4QIO 1,242 42 27 S ABD	3,569 57 43 S ABCD9EF KE9QT (EM34)	N6DN (+KD6DEI,KE6PQY,KO6KS,WB6KUW)	KA7GUX 6,955 102 65 S ABD
KD4FMN 900 41 20 S ABD WA4VUG 120 15 8 S B	2,808 46 39 S ABCD9EF	21,658 196 98 M ABDE	W7ID 1,428 38 28 S ABDE
KE4BM 2,376 72 33 Q AB	KB5YUA 2,560 64 40 S A	Pacific	K7TM (+KB7s PBN,WDV) 18,837 196 91 L ABD
KS4AP 154 11 7 Q D WA4CQG (+KB4NCD)	KE9QT (EM33) 2,508 48 38 S ABCD9EF	KH6HME 348 52 6 S ABD NH6YK 72 10 6 S ABD	KR8L (+KA8TER)
52,288 330 152 L ABD	N5TNM 1,672 44 38 S A		414 20 18 L ABD
WA4UHC (+N4PHP)	KE9QT (EM44) 1,224 31 24 S ABCD9EF	Santa Barbara WR6AAG 56 505 327 147 S ARCDE	Montana
4,080 90 40 L ABD	KE9QT (EM43)	WB6AAG 56,595 327 147 S ABCDE KC6WLC 18,200 176 91 S ABCD	N7ML 43,136 337 128 S A
Georgia	1,161 31 27 S ABCD9E	WA6VQZ 11,856 140 78 S ABCDE	WA7PDC 5,130 92 54 S ABD WA7NWP 4,050 81 50 S A
KK4NO 12,831 134 91 S ABD WD4AFY 8,694 109 69 S ABCD	KE9QT (EM45) 903 26 21 S ABCD9EF	N6QOA 10,614 142 58 S ABCD K1FJM 4,128 96 43 S AB	AA7BG 1,014 39 26 S A
KA2KQM 4,662 89 42 S ABD		KD6RMS 5,880 118 35 Q ABCDE	Nevada

W4WDH 3,956 92 43 S AB		AF6O (+N6MI)	K7CA 44,968 308 146 S A
W4WDH 3,956 92 43 S AB			

K7NV 23,278 206 113 S AB NW7O 14,601 149 93 S ABD	West Virginia *WD8ISK 206,780 568 245 S ABCD9EF	KBØPHS (+WYØC) 2,343 55 33 L ABCD	XE1KK 1,247 43 29 S A
N7WVZ 13,860 152 90 S ABD KF7UV 10,725 125 75 S ABCD	K2UOP/8 116,256 455 168 S ABCD9EFI	Minnesota	Cayman Islands ZF2CP (+ZF2OC)
KCØW/7 120 15 8 S B KC7DGY 48 8 6 S AB	N8XUR 28,483 250 91 S ABDE N8PEK 19,662 195 87 S ABCD	WAØBWE 62,880 343 120 S ABCD9EFG KBØIKP 32,076 243 99 S ABCDE	1,595 55 29 L AB
N7XCZ 153 17 9 Q A	N3IWJ 2,856 68 42 S AB K3JT 1.595 46 29 S ABD	KAØRYT 20,498 200 74 S ABCD	Brazil
NW7O (DM26) 12 2 2 Q E NC7K (+NR6E)	WA3HQK 1,586 61 26 S B AL7PT 464 27 16 S BD	WA2HFI/Ø 12,544 162 64 S ABD WØAUS 10,208 142 58 S ABCDEI	PY2CDS 144 30 4 S ABD
69,420 376 178 M ABCDE WB7TDI (+WA6MNM,AE7I,KF7KM,N7OVD)	N8WUV 252 21 12 S B	NØSRQ 7,548 100 68 S ABD KGØBG 2,736 104 24 S BCDG	Rovers
89,775 434 189 L ABDE	K8OQL 136 12 8 S ABEI N8FMD (+AA8LC,KB8AOB,KV8S,WJ8G,N8s HON,	NØCKK 2,380 55 34 S ABCD	Atlantic
Oregon	KYV,OJK,OKV,VCF,UBH,ZQD) 489,328 1311 272 M ABCD9EP	WØPHD 1,998 43 37 S ABDE WBØLJC 1,520 65 19 S ABD	KB3PW (+N2PEB) 5,460 136 132 R 9 ABCD9EFGHI
KE7CX 34,980 260 110 S ABCD9E N7AVK 29,252 261 103 S ABCDE	K3LNZ/8 (K3DUA,N3PMP,WA3s EOQ,NZL,	KCØP 1,298 49 22 S ABCDE NØNAS 790 59 10 S ABD	N2UIO 2,486 135 46 R 4 ABCDI AA2IZ (+N2XQE)
N7DB 21,483 220 93 S ABCD K7HSJ 7,872 105 64 S ABCDE	OWY,K4LHB,W4PSJ,ops) 143,704 566 184 M ABCD9E	NØOYQ 666 30 18 S ABCD	1,934 130 40 R 4 BCD
W7PUA 7,375 104 59 S ABCDE	9	KBØOBT 72 24 3 S B	N3KTU 618 116 9 R 2 B AA2AM 333 58 23 R 7 AB
N7YAG 7,236 124 54 S ABD WA7IQH 5,428 98 46 S ABCD	Illinois	AAØSY 6 3 2 S B WA2VOI 10,098 120 54 Q ABCDE	Central
N7WNC 480 39 12 Q BD KB7PSH 30 7 3 Q BD	KA9CFD 23,653 189 109 S ABD	KCØP (EN34) 21 7 3 Q B WBØGGM (+WA2PHW,WE7L,KAØJWC,KBØs CV,	K9JK (+WE9V) 20,557 510 299 R 12 ABCD9E
WD4ECK (+W5HVK,WB6FFC)	WD9EXD 18,886 223 71 S ABCD N9UIZ 17,181 183 69 S ABCD	ZQ,NØHJZ) 171,363 544 239 M ABCDEFI	Dakota
25,615 204 109 L ABDE	N9SOR 8,281 130 49 S BCDE N9TNY 5,112 124 36 S ABD	AJØK (+NØROX)	VE4ZK (+VE4KQ)
K7ICW 21,774 191 114 S AB	W9JGV 4.386 129 34 S B	5,360 106 40 L ABCD	9,568 321 201 R 14 BCDEF KBØNVG 54 10 6 R 2 BD
NJ7A (DN30) 12,285 138 63 S ABCDE WA7HQD 10,824 132 82 S A	N9AQ 3,600 70 45 S ABD WB9GKA 2,592 66 32 S ABCDP	Missouri AB4CR 47,576 238 152 S ABCD9EF	Great Lakes
WA7PIB 3,337 67 47 S ABCD	WD9ISG 1,694 77 22 S B WA9BOW 1,450 58 25 S A	KØFF 32,121 200 129 S ABCDI	WB8K 2,000 138 66 R 5 ABD
WB7QBC 1,075 40 25 S ABD KB7DD 646 31 19 S ABD	N9WRO 1,054 52 17 S BD	WAØX 23,540 211 107 S ABD WAØKBZ 11,234 125 82 S ABD	Hudson
NJ7A (DM49) 230 15 10 S BCDE N7SFT 1,560 49 26 Q ABCD	K9SM 576 26 18 S ABCDE	NØMMU 9,536 129 64 S ABD KGØTQ 5.336 116 46 S B	AA7QZ/2 4,072 126 69 R 3 ABCD N2KJM 1,881 143 39 R 4 BD
WB7VLJ (+WA7PXD) 29,440 194 128 M ABCDE	NEØP/9 40 10 4 S A W9SZ 1.856 48 29 Q BD	NØODZ 4,536 84 54 S AB	WB2BEJ 1,416 91 23 R 2 ABCD
KC7LHJ (+KE7OI,KC7KYQ)	W9UD 817 28 19 Q BCD AA9D (+N8KWX,WD8KHE,AA9IL,K9s PW,VV,	KRØI 4,059 89 41 S ABD	N2YYU 1,306 116 28 R 3 BD WB2AMU 590 42 21 R 2 AB
12,986 134 86 L ABDE	N9s EXU,KC,OGU,WB9s EEA,TIY)	WØJRP 2,992 60 44 S ABCD KØTLM 2,574 64 39 S ABC	N2QFH 205 33 9 R 2 ABD AB2J 20 3 3 R 2 IP
Western Washington WA7UQV 40,905 375 101 S ABCDE	538,772 1079 338 M ABCD9EFGHIJP N9LAG (+KF9s OK,US,N9s BJG,KJE,QKZ)	N5MXU 2,346 69 34 S AB NØXKS 891 33 27 S A	Midwest
KE7SW 25,536 248 84 S ABCDE	67,536 388 144 L ABCD	AJØE 800 40 20 S AB	KØDAS (+KAØYSQ)
N7MWV 17,080 203 70 S ABDE KA7MCX 15,096 222 68 S AB	Indiana	NØQOJ 300 25 12 S B KMØL 192 24 8 S B	7,714 184 140 R 5 ABCD KØTLM (+AJØE)
WI7Z 14,972 184 76 S ABCD KD7TS 9,495 152 45 S ABCD9E	N9MKC 83,700 518 135 S ABCD W9OEH 22,236 327 68 S B	North Dakota	5,302 164 117 R 6 ABCD9E
N7YAP 7,410 109 65 S ABD N7RZA 5,610 132 34 S ABDE	AA9LT 15,150 176 75 S ABCD K9DZE 7,644 128 49 S ABD	NTØV 4,200 58 50 S ABCDE KBØLXX 456 24 19 S A	N5NIQ 3,980 146 104 R 7 BCDE N4STK 457 39 39 R 7 ABCD9EF
W3JPT/7 3,618 122 27 S ABD	N9QX 6,600 101 50 S ABCDE WB9VIO 5,535 110 45 S ABD	WDØEMY 240 20 12 S AB	New England
KX7L 405 27 15 S A N7EPD 330 22 15 S A	K9EA 4,810 65 37 S CD WB9DRB 4,770 73 53 S ABCD	Nebraska	N1NCI (+KA1TWX) 1,690 140 40 R 4 BD
WA7KPK 48 16 3 S B WA7SKT 24 8 3 S B	N9RZY 2,190 73 30 S B	WØBJ 12,798 146 79 S ABDE KAØJGH 9,322 118 79 S AB	N1QVE (+N1QDQ)
N3EG 18,172 209 77 Q ABCD KC7KUH (W6MX,KB7s N,TJB,ZTV,W7s GKF,	NY9B 1,378 46 26 S ABD W9JVF 750 50 15 S B	NØYNP 4,935 105 47 S A WDØBQM 4,600 73 50 S ABCDE	WA1UWU 431 63 16 R 3 B
HQJ,VMF,ops)	N9KZJ (+N9LRR,W9SU) 10,143 142 63 L ABD	KØGCJ 3,160 59 40 S BDE	N1RHS 423 38 12 R 2 BCD K1DS 105 16 12 R 2 BCD
22,222 260 82 L ABD N7TCD (+KI7NC,N7ZMC)	W9YB (KA9CCR,KC9RG,ops) 4,320 79 40 L BCD	AEØG 2,760 60 46 S AB	Northwestern
12,780 199 60 L ABD WA7NCL (+KE7WB)	Wisconsin	South Dakota W7XU 13,112 145 88 S ABCD	W7HAH (+WA7KHO) 7,366 191 113 R 3 ABD
1,960 97 20 L ABD	WF9X 30,702 220 102 S ABCDE	WBØHHM 5,280 81 48 S ABCD K1LL/Ø (+WBØOAJ,WVØH)	KA7YOU 1,223 142 99 R 17 ABCD
8	KA9UZW 11,664 131 72 S ABCD WA9ACI 5,016 101 38 S ABDE	` 43,848 344 126 L ABD	N7OKG (+N7NQO) 820 47 29 R 2 ABCD
Michigan	WB9VYP 4,212 101 36 S BD WA1UJU/9 1,848 84 22 S B	KBØRBF (+NSØN) 240 20 12 L B	Pacific
KUBU 57,200 371 130 S ABD K8MD 55,878 306 134 S ABCD9E	WA9LZM 1,430 55 26 S AB	VE	NGØX (+K2MM) 13,453 278 150 R 6 ABDE
KØBI 38,448 293 108 S ABDE WZ8T 33,522 245 111 S ABCD	ND9Z 1,232 37 28 \$ ABD	Maritime-Newfoundland	N6IPE 4,251 128 76 R 3 ABCDE KM6RH 2,917 140 69 R 6 BCDE
N8EDQ 20,812 200 86 S ABDE	NØAKC 760 33 19 S ABD W9YCV 351 22 13 S BD	VY2KX 320 20 16 S A	KC6UDS 1,652 92 50 R 5 BCD
WD8BKM 19,600 201 70 S BDE K2YAZ 15,836 156 74 S ABCDE	N9PBA 20 5 4 S AB *N9CIQ 13,870 158 73 Q ABD	VE1AKT/1 210 21 10 S B	Roanoke
KU8Y 13,752 128 72 S ABCD9E WB8TGY 12,529 138 67 S ABD9E	WØUC (+KB9EQI,KØGJX,NØs AKC,AXL,BSH) 190,931 646 247 M ABCD9E	Quebec VE2JWH 476 28 17 S A	ND3F 21,122 524 258 R 12 ABCDE KC4ZRH (+KD4GAR)
N8MKH 12,261 153 67 S ABCD KG8FK 9,690 171 51 S ABD	Ø	VE2PIJ 550 41 11 Q BD VE2CUA (VE2s DUB,HFX,HKI,KWA,MHO,	3,145 93 61 R 2 ABD WA4UCI (AC4LS,KB4NVD,ops)
NQ8A 3,444 56 41 S ABCD9E WABLKD 3,136 98 32 S B		YBU,ops) 3,990 77 38 M ABCDE	3,089 102 74 R 4 ABCD N3TUM 2,040 105 61 R 4 BD
WB8OGM 3,034 82 37 S A	Colorado NØYGM 42,681 281 123 S ABCDE	Ontario	WR3Z 150 25 9 R 3 B
KT7G/8 2,106 78 27 S AB N8IVW 1,586 61 26 S B	K7VNU/Ø 22,770 230 99 S A	VE3VD 29,100 300 97 S AB VE3RM 22,407 192 97 S ABCD	KS4LB 83 28 10 R 5 B
KG8W 714 34 21 S B N8YBY 490 35 14 S B	NØIVN 18,426 200 74 S ABCD9E KØGU 17,982 222 81 S A	VE3WCB 14,916 158 66 S ABDEF VE3SXE 7,680 121 60 S ABD	Rocky Mountain N7MLD 5,474 150 101 R 3 ABCD
KK7B 216 13 12 S ABCDE WW8M (+N8OGT,NESI,WASVPD)	WØPTU 1,496 44 34 S A KDØDW (K2LCT,W2CRS,WØETT,ops)	VE3FHU 7,308 96 63 S ABCD	NØSWV 57 17 8 R 5 B
204,414 568 217 M ABCD9EFGH	110,840 500 163 M ABCD9EFGI NØHAX (+KFØKR)	VE3TMG 5,781 141 41 S AB VE3OJN 3,496 86 38 S ABD	KB7TJM 31 10 7 R 3 B Southeastern
N8HNS (+N8HXP, WA8TON) 8,635 134 55 L ABCD	23,688 217 94 M ABCDE	VE3UX 2,772 67 36 S BD VE3VHB 1,128 47 24 S B	*AD4DY (+KD4OQW)
Ohio	W1XE (+WØKEA) 43,173 332 123 L ABCD	VE3EKP 1,000 40 25 S AB VE3BHW 612 34 18 S B	4,601 137 67 R 2 AB W4RYZ (KD4s KEC,POJ,ops)
KE8FD 165,393 548 207 S ABCD9E W8ULC 118,534 474 194 S ABCDE	lowa	VE3DNR 8 2 2 S D VE3SMA (+VE3OIK)	732 63 19 R 3 ABD
WZ8D 92,225 415 175 S ABCD	KDØHE 15,132 144 97 S ABD KDØPY 7,488 134 48 S ABD	2,622 57 38 L ABCD	Southwestern K6LMN 19,737 270 135 R 3 ABCD
WA4GPM 73,386 347 151 S ABCDE WA8TJL 50,160 269 132 S ABCD9EF	NØRJJ 2,079 63 33 S B NØSPP 1,764 48 36 S ABD	Alberta	AA6U (+KD6DHB)
K8MR 41,234 324 106 S ABD AA8Q 37,476 300 108 S ABD	WØYPT 1,680 37 28 S BCD	VE6JY (+VE6s BMR,LDX) 13,632 186 64 L ABD	12,493 463 280 R 16 ABCD WA6RAY (+K6AWO)
WA8QNR 22,704 230 86 S ABCD N8GHU 16,224 144 78 S ABCD9E	KEØY 1,652 45 28 S BD KØJQA 1,560 60 26 S B	British Columbia	3,278 96 64 R 2 ABD KD6DYK 2,553 106 39 R 3 BCDE
N8SSH 7,987 163 49 S AB KB8RZV 6,027 147 41 S B	KDØBT 351 19 13 S BD WYØV 260 20 13 S B	VE7CA 9,412 175 52 S ABD VE3GBA/7 2,240 112 20 S B	West Gulf
N8VEA 4,572 110 36 S ABD	*NN9K/Ø 40,228 282 113 Q ABCD KØVM(+KD9KX,AAØWO,KAØIES,KEØAX,NØ\$CIH,LNO,	VE7ASI 1,482 50 26 S ABCD	WRØI 981 90 72 R 8 ABE
W1FEZ 2,670 82 30 S BD NX8M 1,349 58 19 S ABCD	WBØYFL) 46,292 263 142 M ABCDE	VE7XO 1,080 40 27 S AB VE7SKA (+VE7FEI)	Canada
WA8SVV 1,224 51 24 S A AA8RR 576 23 18 S ABCDE	NØNGZ (+KAØZOZ) 10,050 125 75 L ABD	15,624 213 72 L ABD VE7NUT (VE7s BEE,CWB,HPR,MJT,RJ,ops)	VE3NPB (+VE3OIL) 6,285 127 69 R 2 ABCDE
N8CXC 448 28 16 S AB N8SBA 429 33 13 S B	Kansas	13,760 166 80 L ABDE VE7ZZX (+VE7ITI)	VE6DLS (+VE6VEM) 1,019 55 28 R 5 ABD
N8ZAT 377 21 13 S ABCDE	NØLL 110,986 444 211 S ABCDE WQØP 23,312 163 94 S ABCDEI	4,520 113 40 L AB	K7CW/VE7 570 75 27 R 5 BDE
W8WG 294 21 14 S AB N8GHU (EM89) 21 7 3 S AB	KBØHH 22,748 201 94 S ABDE	Cuba	Marine Mobile
N8GHU (EM88) 15 5 3 S AB N8GHU (EM79) 15 4 3 S ABD	NØFFO 15,580 163 82 S ABDE	CO2JA 800 40 20 S AB CO2CF 18 9 2 S B	KS4KP 120 19 6 S BD
KABJQW/N 12 3 2 S C KABJQX/N 12 3 2 S C	N5ZVG 8,256 129 64 S A KFØM 7,590 125 46 S BCD	COØVHF (CM2s CE,KW,RK,SD,CO2s AD,OD, SA,ops) 2,210 85 26 L AB	Checklogs KA2EXB, KA2MCU, KE6DII, N2PEQ, WA8NJR
N8GHU (EM78) 8 4 2 S AB	KBØMME 5,460 91 60 S AB KFØRB 4,180 110 38 S B	Anguilla	Disqualified
KBBQBM 8,281 131 49 Q ABCD N8AXA 7,242 108 51 Q ABCDE	NØPAL 2,695 61 35 S ABD WØRT 2,520 70 36 S AB	VP2ECW (N6CW,op) 6 3 S A	WB2ODH
N8KOL (N8s ICH,WHY) 34,960 231 115 M ABCD9E	NØQXC 528 33 16 S B KØBJ 252 18 14 S A	Mexico	
KA8HHU (+KB8s LPW,TEU,UUD,,YPU,YXC, KG8JI,N8UVM)	NØTOU 81 9 9 S A NOØY 33 11 3 Q B	XE2/NH6ZF 4,488 136 33 S AB XE1AVM 1,426 46 31 S A	
5,670 102 54 L ABD	100 II 3 Q D		nci.
			IFECT.