

Results, Seventh Annual ARRL 10-Meter Contest

QRO or QRP, 28 megs was the place to be!

By Bill Jennings,* K1WJ and Tom Frenaye,** K1KI

For the next several years at least, we're going to look back at 1979 as the "good old days" of the 10-Meter Contest. We don't mean to say that 10 is going to dry up and go away, but we have reached the peak of solar cycle 21 and what goes up does have to come down. Of course, the band isn't just going to fold up like a poleaxed water buffalo, as we should have fairly decent conditions for the next 10-Meter Contest or two.

It will be readily apparent to anyone who follows the ups and downs of solar activity/band conditions vs. number of stations on to be worked/submitting entries in a contest that with the "record" fine conditions will come a record of number of entries. The 1979 10-Meter Contest, held December 9 and 10, 1979, was indeed number one at least in terms of total number of entries — 1565 (1013 W/VE and 552 DX) and average score. Quite a contrast to the Third 10-Meter Contest (1975) when the conditions were the poorest in the history of the contest and the entries were at a record low of 628. Stands to reason that if

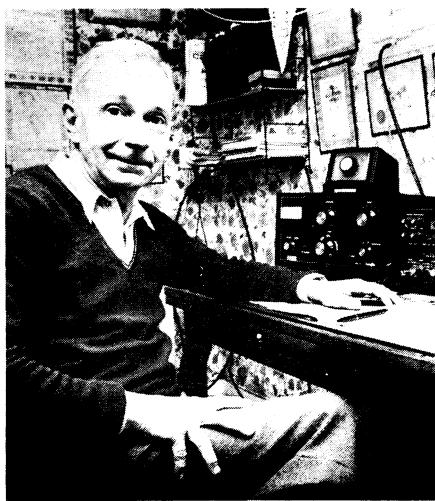
there are more people on playing in the contest, there are more stations for the big guns to work, and some higher-than-average scores should appear in the results. Absolutely. N7DD at 945 k points and VE6KW with almost 940 k points, about 3400 QSOs and 140 multipliers apiece, make the point quite nicely. In fact the 1979 W/VE 10-Meter Top Ten averaged over 104,000 points, at an average score of 674,938 points, better than the Top Ten of the 1978 contest.

Excellent band conditions are only about half the battle in trying to make the top ten in this contest. You've also got to have the experience in contest operating and a station capable of putting out that *big* signal. Hard to tell just exactly what the "ideal antenna array" is from the diverse configurations used by this year's top W/VE participants. For example: N7DD 5-element wide-spaced Yagi at 65 feet; VE6KW 5-element Yagi at 75 feet; K7LR 10-15 duoband Yagi at 40 feet; N7DF 5-element Yagi; K5RC 5 elements at 70 feet, 7 elements at 85 feet, and 5 elements at 150 feet; W0YK 7 elements at 37 feet and 7 elements at 128 feet; N7XX 4-element Yagi and 6-element Yagi (height not specified); W0SD 3-element Yagi at 70 feet and a Hy-Gain DB10-15 at 150 feet;

W0UA TH3 tribander at 85 feet and 4 elements (fixed east) at 48 feet; and W7EJ 3-element Yagi at 45 feet and 6-element Yagi at 102 feet.

If you believe that old adage "when 10 meters is hopping you can work the world with 5 watts to a wet noodle," you're going to want to plan to enlarge that 10-meter array and start adding height as the propagation begins to get a little worse. Better yet, raise one 10-meter antenna to improve your groundwave signal and keep a lower antenna for the higher angle of radiation to utilize those less-frequent openings.

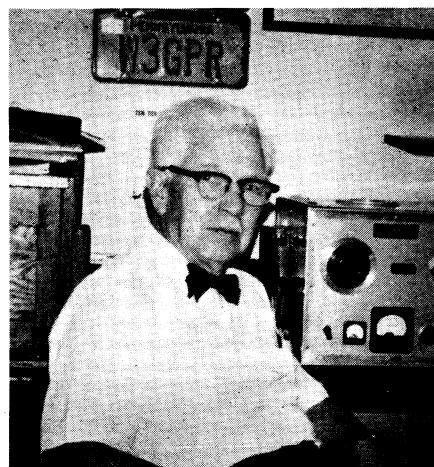
A big amplifier and a "killer" antenna array may help an op to carve out his own portion of the band, but were definitely not necessary components to be able to turn in a decent score. Take the top QRP entry, which was turned in by N2AA. From home, Gene runs a Yaesu FT-301S at 5-watts output to a 3-element Yagi at 20 feet. Gene had a couple of nice JA runs, a few 40-QSO-plus hours into Europe and a few times did 50 to 60 QSOs per hour with stateside stations. Interesting to note that in the N2AA log were 714 QSOs (16 Novice and Technician types) and 110 multipliers (49 States, 7 VE multipliers and 54 DXCC countries).



Ivan, F3AT, finishing up the paperwork prior to submitting his contest log.



DXpedition to Wyoming. WD8LLD/7 and KA8D/7. Operators from the left are WB8BZX, WD8LLD, KA8FXU, KA8D. The guys said that there were so many antennas on the motor home that it looked like a big rolling porcupine.



Seventy-years young and 50 years in Amateur Radio. Ted, W3GPR, still likes to take a little time for contesting from Eastern Pennsylvania.

Division Leaders

Single Operator Division		Multioperator	
K3ZJ	Atlantic	K3WW	
W9RE	Central	K9HV	
WØSD	Dakota	KØSR	
W5WMU	Delta	WD5BOL	
K8LX	Great Lakes	AA8U	
WB2WIK	Hudson	W2YV	
WØKK	Midwest	WØGM	
K1VTM	New England	K1GQ	
K7LR	Northwestern	KL7Y	
N6BT	Pacific	K7SFN	
N8II	Roanoke	N4RV	
WØYK	Rocky Mountain	KØRF	
N4BP	Southeastern	KB4KJ	
N7DD	Southwestern	K6AA	
K5RC	West Gulf	N5FF	
VE6KW	Canadian	VE4XK	



Members of the Baden ARC living in the Canadian military community in West Germany. Left to right: DA1YT, DA1MH and DA1FN.

Top-Ten W/VE — Single Operator

Call	Score	QSOs	Mult.
N7DD	945,000	3375	140
VE6KW	939,760	3455	136
K7LR	758,910	3079	123
N7DF	700,348	2894	121
K5RC	696,500	2786	125
WØYK	693,248	2707	128
N7XX (AH6Z)	683,060	2870	119
WØSD	681,250	2725	125
WØUA	679,276	2772	122
W7EJ	672,384	2472	136

Top-Ten W/VE — Multioperator

Call	Score	QSOs	Mult.
KØRF	867,620	3055	142
W2YV	730,002	2483	147
N4RV	700,282	2507	139
VE4XK	676,000	2704	125
AA8U	623,052	1923	162
WØCP	622,440	2660	117
K1GQ	600,356	2326	129
K3WW	599,256	2378	126
WB1HIX	557,056	2048	136
K8AZ	540,994	1970	134

SOAPBOX

Thanks for another great 10-meter contest. . . . I would like to see a point scheme such as two points per phone QSO, four points per cw QSO and six points per Novice QSO as the QSO rate on phone makes cw (and especially Novice cw) somewhat undesirable. . . . this was the most action I've ever seen on 10 meters at one time and I loved every minute of it (N5HD). [Next year's 10-Meter contest will allow single-operator stations to enter a mixed phone and code, cw-only or phone-only category. — Ed.] There was never a shortage of stations to work; sometimes it seemed like the entire contest was taking place in the Novice band. Great! (KA5FAS/N). Time spent on the 10-Meter Contest: Put up and test antenna — 5 hours, prepare logs and other forms — 1 hour, get psyched up — 24 hours, contest — 30 hours, sleep during the contest — 16 hours, fix broken rotor during the contest — 2 hours, post-contest QSOs — 2 hours, dupe logs/count multipliers — 100 hours, projected time to answer the huge stack of QSL cards needing Vermont — 30 hours. Total time spent — 210 hours! *And they call this a hobby??* (WB1GQR). I have a gnawing feeling that many of the "KAs" that I worked were forgetting to put /N or /T after their calls (WA2HEB/T). After the contest, I discovered that my 7-element beam direction-indicator had slipped 30 degrees. Conditions sure must have been good — for others! (W9LT). Heard many ops missing a good bet by not even trying to work the meteor scatter that rolls through late at

night. There are easy contacts to be made via m.s. on 28 MHz, to fill in those 500- to 1000-mile paths which are nearly impossible to work via other modes (WB2WIK). Should be able to operate the full 48-hour period of the contest (WD5ABF). It is interesting to note that section 96.67(b) of the FCC regs states "Amateur Stations shall use the minimum amount of transmitter power necessary to carry out the desired communication" (KA1CZF/N). . . . as MacArthur once said, "I shall return." (WA2NHA). It is my belief that if this contest was held next month, with the education that I have received from this one, my score would increase by 50% to 75% (KAØELX). What happened to Africa and South America? Am I the only one who didn't hear them? Not one signal from S.A. or Africa either day, but Europe and JA were super (WB9WX). Didn't know anything about contesting and it dawned on me too late in the game that I should be calling CQ instead of digging out multipliers (WD4LTD). Murphy paid me a visit during the contest and brought some TVI with him. He also did a job on my VOX circuit, my antenna traps and my receiver preamp. If he thinks he has found a home here, he'd better think again, 'cause if I find him, I'm gonna waste the chump once and for all (N9AQ). Being able to switch from cw to ssb made it a lot more interesting and fun (WDØFGY). This really needs to be scheduled at a different time. The weeks immediately before the long holidays are needed for more family oriented activities. In North America, January would be a good time because no one has any money left to

Top-Five DX — Single Operator

Call	Score	QSOs	Mult.
TG9GI	635,296	2466	128
G5CMX (N8ET)	547,162	2055	133
PJ2FR	529,584	1947	136
SM5GMG	523,164	1938	134
YU7BCD (YU7OQI)	490,320	1805	135

Top-Five DX — Multioperator

Call	Score	QSOs	Mult.
G3FJE	572,994	2187	131
UK2GKW	544,368	2062	132
LU5E	525,720	2021	130
HK3TF	511,048	2012	127
SMØAQD/OHØ	492,378	1797	137

go anywhere after the holidays (VE3FIU/K8HI). Also, the non-contesters on the band seem to think that an op changes into a monster when working a contest by forgetting common courtesy. Not so. Try telling that to the AC5 station who broke up by best run by calling someone on SSTV, which he said was "more important." Horse Hockey! I'm for a published "Lid List." (KA1FJ). It took me six hours to enter my contest log into my computer, three minutes for the computer to print the log, then 12 hours for the computer to alphabetize all the calls and one minute to print the dupe sheet (WA4CYR). Really bananas! High rates, Rare multipliers, phone, cw, Novices, just everything — an incredible brawl! (WØUA).

FEEDBACK

Kindly note the following additions and corrections to the 1978 10-Meter Contest (see page 81, June 1979 *QST*).

At 7452 points in the South Carolina Section, the call listed should read WD4PMU, not WD4DPU.

N9AHY is really located in the Illinois Section, not in Wisconsin as printed.

The top Novice score from Missouri belongs to KAØCMK/N, not KAØCHK.

In Colorado, WBØGX/N is really WDØGX/N. F6EBA should have a line score of 64,130 - 583 - 55 Late mail delivery from overseas brought us a check log from UK9AAC; didn't know anything about contesting and it dawned on me too late in the game that I should be calling CQ instead of digging out multipliers (WD4LTD). Murphy paid me a visit during the contest and brought some TVI with him. He also did a job on my VOX circuit, my antenna traps and my receiver preamp. If he thinks he has found a home here, he'd better think again, 'cause if I find him, I'm gonna waste the chump once and for all (N9AQ). Being able to switch from cw to ssb made it a lot more interesting and fun (WDØFGY). This really needs to be scheduled at a different time. The weeks immediately before the long holidays are needed for more family oriented activities. In North America, January would be a good time because no one has any money left to

Almost left out:

Michigan

AA8U(+A18D), K8s DMG LF MJZ SXA YHH, KA8s AEE BXD FAK, N8AW, WB8QZL, WD8s BDK BDW BWN MBB RRC SBJ 623,052-1923-162-36

Disqualifications:

N6CCN

Scores

Scores are listed by section within each U.S. call area, by Canadian call area, and by continent/country, according to prefix. The highest single-operator station in each ARRL section and country receives a certificate. The highest multiple-operator station in each section and country and the highest Novice score in each ARRL section receive certificates, if there are three or more entries listed in that classification or if, in the opinion of the Awards Committee, the entrant displayed exceptional effort. Read the listings (left to right): call, score, QSOs, multiplier, hours of operation.

DX

Japan	JA1OP	19,920- 159- 60- 9	JL1VHB	2058- 49- 21- 5	Mongolia
JA70WD	JH2ORJ	18,612- 141- 66- 21	JALCP	1020- 30- 17-	JT1BG
JR1WHW	JJ1OSP	17,052- 135- 58- 16	JL1KPP	400- 20- 10-	
JK1IYM	JH4DU	16,116- 124- 67- 1	JR3QCT	252- 14- 8- 13	
JA9SQO	JE3FUN	15,160- 150- 35- 14	JA9BV	224- 14- 8-	
JH1AGU	KA8NA(K2NA,opr)	15,120- 124- 56- 6	JH1FJK	70- 7- 5-	
JH1AQ	JH1AQ	15,080- 128- 52- 12	JA3BCT	50- 5- 5-	
JH7JGC	JH7JGC	15,056- 112- 96- 25	JA2YKA(JH2QX,G,JR2GMC,		
JA9E3QC	JA6AKV	13,700- 143- 50-	JR3URO,JA4UDP,JH4VBQ,		
JF1ISEK	JA6GPL	11,161- 130- 44-	JA9NFO,opr)		
JF1PUK	JE6FME	11,200- 105- 50- 22			
JF2WB	JH7BRG	10,128- 107- 44-	JAYAA(JH7AEF WTC,JR7OMB,		
JL2AV	JH1BBQ	10,100- 124- 44-	JAY9PPC,opr)		
JA1EIM	JH1EIM	9,964- 102- 47-	235,108-1109-106-33		
JA7NVF	JH4YPE	9,730- 120- 35-	UA9YDX	94,776- 718- 66-	
JR3COZ	JF3CEC	8,954- 123- 37-	UA9SAX	74,740- 505- 74-	
JA7JND	JH1JMH	8,208- 108- 38-	UA9CBM	63,294- 411- 77-	
JH1WIX	JR3CVO	8,084- 91- 43- 10	UA8CED	62,514- 453- 69-	
HM1QD	JH4GEU	5,928- 76- 40-	UA9ZP	52,000- 500- 50-	
JH2DHL	JH2DHL	5,900- 77- 40-	UA9QBT	57,024- 528- 54-	
JH1IUT	JH2AT	5,402- 73- 37-	FVR KWQ,opr)	48,600- 405- 60-	
HS1ABD	JH4HLN	23,182- 164- 67- 9	138,556- 729- 94-	UA9LFLK	
	JK1VXH	21,838- 179- 61- 9	JA2YAC(JA2EJ,JA2QI,opr)	43,164- 218- 99-	
			JA2YACM	41,160- 294- 70-	
			JA2YFC	37,448- 302- 62-	
			UA9SDL	32,982- 239- 69-	
				29,568- 224- 64-	

UA9QBS	22,390- 265- 63-	Isla de Man	ON4FD	6464- 99- 32-	White R.S.S.R.	HC2BW(W1VEH,opr)	
UA9CCD	3840- 57- 32-	GD4GWQ	2484- 46- 27-	ON7VP(+ON6NW)	75,200- 487- 75- 15	46,200- 275- 84-24	
UA9NP	3816- 66- 28-					Dominican Republic	
UW9WI	1292- 38- 17-	Scotland	Faroe Islands			K9EF/HI8	
UK9WBR(Multipop)	129,872- 724- 89-	GM3YOR	185,250- 970- 95-	OY1AT	16,432- 158- 52-	158,064- 888- 89-	
UK9UAC(Multipop)	117,600- 784- 75-	GM3RAO	167,642- 769-109-			Colombia	
UK9UCH(RA9UIF,UA9s,UDL,USD,opr)	71,898- 521- 69-	GM4CHX	22,144- 173- 64-	Denmark		HK4UT	
UK9SAW(Multipop)	55,056- 444- 62-	Guernsey	OZ5EV	389,988-1413-138-	Azerbaijan	1496- 34- 22-	
UK9SAV(Multipop)	118,810- 371- 55-	GU3YIZ	OZ7BW	44,252- 299- 74-		HK3TF(+HK3AXT)	
UK9KAF(Multipop)	11,808- 164- 36-	GU3MBS/M	OZ6XR	41,720- 301- 70-	Argentina	511,048-2012-127-32	
UK9MCN(Multipop)	3480- 57- 29-	Wales	OZ1BLR	20,582- 293- 66-	LUSFGG	32,768- 256- 64-23	
UK9PAL(Multipop)	1324- 47- 16-	GW4BLE	OZ2UA	20,584- 166- 52-	LUSE(LU1BR,LU2AFH DSL,		
UK7LAF(Multipop)	23,900- 239- 50-	Hungary	OZ1CGW	16,912- 151- 56-	LU3s AJW, DLR, oprs)		
UK7LAW	191,672- 988- 97-	HA5KBM	OZ9OL	6570- 73- 45-	Georgia	325,720-2021-130-36	
UL7PBY	70,290- 495- 70-	HA0HW	OZ1CCB	3492- 61- 36-	Moldavia		
UL7TA	37,080- 301- 61-	HA1344	OZ2BM	1680- 28- 28-	PJ2FR	529,584-1947-136-33	
UL7VAS	27,642- 271- 51-	HB8KQX(HA8BV,opr)	OZ4HW	1596- 38- 21-	Brazil		
UL7PA	20,250- 216- 47-	HA6KNV(P(Multipop))			PT2BW	45,892- 298- 77-	
UL7JCA	20,304- 216- 47-	HB7G(HB7AW,opr)			Trinidad		
UL7DBD	13,962- 179- 39-	HB9LP	PA0DUO	47,268- 234-101-	9Y4VU	10,738- 91- 59- 5	
UL7ECJ	8382- 127- 33-	HB7BOW	PA0GT	29,638- 203- 73-	W/VE		
UK7PAL(Multipop)	23,900- 239- 50-	HB7BRQ(K3KWJ,opr)	PA0ABE	29,200- 200- 68-	1		
UK7LAF(Multipop)	7476- 89- 44-	HB7BRQ(K3KWJ,opr)	PA0ACM	12,540- 110- 57-	Connecticut		
India			PA0AKS	9840- 120- 41-	Latvia		
VU2GO	28,288- 272- 52-	I4JCC/5(W3US,opr)	PA0AJA	9292- 101- 46-	K1VTM	641,832-2276-141-33	
Cyprus		402,960-1460-138-30	PA0DUK	7896- 84- 47-	W1WEF	320,124-1440-111-26	
5B4HF	377,568-1656-114-20	I3XCE	PA0EIE	7566- 97- 39-	K1TO	214,756-1001-106-20	
		I3IET(+13MALU)	PA0FMT	7070- 97- 39-	K1MC	183,620- 83-100-12	
		273,828-1201-114-24	PA0VN	3240- 60- 27-	K1CC	29,600- 80- 89-30	
Europe			PA2DXY	2350- 47- 25-	K1EB	71,200- 400- 89-30	
Andorra		Netherlands	PA0UV	1520- 40- 19-	WA1FCN	57,768- 332- 87-	
C3IMK(EA3s NE WZ,opr)	299,000-1300-115-19	HA6KNV(P(Multipop))	PA0QJM	9840- 120- 41-	AB1U	37,440- 288- 65- 7	
Portugal			PA0TUK	9292- 101- 46-	W1ICH	27,724- 239- 58-14	
CT4NH	76,800- 384-100-	Italy	PA0U	7896- 84- 47-	W1CNJU	25,916- 206- 62-10	
CT1AIU	65,532- 381- 86-	I4JCC/5(W3US,opr)	PA0V	7566- 97- 39-	W1VBE	20,000- 176- 57- 9	
Federal Republic of Germany			PA0W	7070- 97- 39-	WB1EAZ	18,792- 162- 38- 9	
DL8PC	465,608-1628-143-	Switzerland	PA0X	3240- 60- 27-	K1TN	18,240- 190- 48- 3	
DJ3JH	358,118-1307-137-25	LA6ZW	PA0Y	2350- 47- 25-	K1TG	17,864- 154- 58-11	
DK2MN	170,856- 791-108-28	LA9HW	PA0Z	1520- 40- 19-	WB1CRI	10,920- 85- 60- 6	
DF8XL	65,764- 400- 82-	LA2GN	PA0Z	9840- 120- 41-	WB1HLU	9438- 143- 33-12	
DK7ZT	40,752- 282- 72- 7	LA3UG	PA0Z	9292- 101- 46-	K1CZS	8288- 89- 37-16	
DL1RB	31,464- 228- 69-	LA2IJ	PA0Z	7896- 84- 47-	K1CFZ/N	6930- 99- 35-10	
DA2AL(WB3EP,opr)	30,660- 210- 73-22	LA7SI	PA0Z	7566- 97- 39-	K1DII	6656- 92- 32-3	
DJ2YE	27,588- 200- 66-13	LA5YY	PA0Z	7070- 97- 39-	WB1FVJ	4608- 48- 9-9	
DF3LZ	20,100- 201- 50-	LA1VL	PA0Z	6762- 138- 49-	K1RTR	1952- 60- 16-22	
DK8JB	19,800- 117- 45-	LA4LG	PA0Z	51,528- 339- 76-	W1CIV	11,000- 45- 13-2	
DL7CF	17,952- 165- 48-	LA2AD	PA0Z	190,082- 941-101-	W1CUH	416- 15- 13- 7	
DL9GG	9,936- 100- 44- 7	LA2YT	PA0Z		K1NYK(+KA1BMB GD,		
DJ6JB	9,936- 90- 47- 7	Bulgaria	SP9CAV		WA1YEC,WB1G(F)		
DL1YA	8742- 90- 47-	LZ2DB	SP9CBW	98,766- 531- 93-	K1MUJ(WA1s GBA HYN,opr)		
DF3QN	6084- 78- 39-	LZ2VE	SP9PDF	23,058- 189- 61-	WB1GOO(+WB1DPR)		
DF8NO	2450- 43- 25-	LZ2GS	SP9PDX	10,040- 120- 46-	132,512- 609-101-30		
DL1AM	1334- 27- 23-	LZ2KKZ(Multipop)	SP9PSG	1080- 30- 18-	Eastern Massachusetts		
DK9KT	1,181- 54- 10-	Austria	SP9QAV		WB1ANT	383,724-1683-114-27	
DL9PKW(DF1ZE,DF5ZF,DF7ZF,DK8WD,DL32A,opr)	1,181- 54- 10-	OE2VEL/1	SP9QCM		W1IHN	140,976- 711- 99-20	
DK9TU(DK1PD,DK5KG,DK9NX,DL7s XB ZN,opr)	426,360-1615-132-	OE1ETK	SP9QD		K1VUT	102,856- 551- 92-19	
DA2BS(DA1s F1M QR XH YT,DA2WC,opr)	333,450-1401-117-	OE5HAD(OH5K,opr)	SP9QF		W1FMT	95,368- 512- 91-16	
DA4EM(B,opr)	180,992- 829-112-29	OE4PW	SP9QG		K1FWF	78,822- 453- 87-16	
DL9VK(DK4ZK,DK5s A,DK9NX,DA1XL,UY VM VN,DA2LB,DA4EM,opr)	147,960- 651-108-28	OE2BKY	SP9QH		K1GXZT	71,810- 349-100-19	
DA1XL(DA1s F1M QR XH YT,DA2WC,opr)	92,020- 535- 86-26	OE2BZA	SP9QI		AD1C	60,120- 68- 89-24	
German Democratic Republic		OE3NMF	SP9QJ		W1AQE	50,020- 305- 89-24	
DM2BTO	240,352-1035-116-	OE4PWF	SP9QK		K1GRB	44,718- 257- 87-15	
DM3XLL	60,610- 55- 55-	OE4RGC	SP9QL		K1LXJ	35,568- 228- 78-15	
DM3XKI	47,000- 53- 53-	OE4RGE	SP9QM		W1PL	35,092- 283- 62- 7	
DM3NKF	31,356- 234- 53-	OE4RGI	SP9QV		K1RE	28,392- 182- 78-26	
DM3SBBM	27,900- 166- 75-	OE4RGM	SP9QW		K1RDFV	19,440- 102- 62- 6	
DM4VCE	21,328- 172- 62-	OE4RGP	SP9QX		K1RC1CLV/N	19,484- 102- 62- 6	
DM3TH	13,780- 130- 53-	OE4RGP	SP9QY		W1PLJ	11,782- 137- 43-11	
DM4WF	7722- 99- 39-	Czechoslovakia	SP9QZ		K1UR	6510- 93- 35- 3	
DK2JIF	7400- 107- 37-	OE4RGP	SP9QZ		AD1C	6480- 89- 36- 7	
DM3UJ	65,632- 72- 44-	OE4RGP	SP9QZ		WA1YVT	3286- 53- 31- 8	
DM4QWL	5624- 97- 36-	OE4RGP	SP9QZ		WA1UZH(+WA1ZXB)	442,334-1827-121-33	
DM4XCE	4600- 57- 46-	OE4RGP	SP9QZ		AE1P(+WB1FL,opr)	210,944-1021-103-32	
DM3ZJL	4130- 59- 35-	OE4RGP	SP9QZ		AB1F(+AB1X,NIASF)	117,040- 582- 95-31	
DM5VNH	3924- 77- 26-	OE4RGP	SP9QZ		N1AEQ(+K1s LX NTS ZZ,K1A1s	116,922- 601- 97-35	
DM2EVH/P	2496- 52- 24-	OE4RGP	SP9QZ		AAD BVN DAS(1A1s AOW)	WB1FWS(+KA1BCV)	91,532- 467- 98-30
DM2ZEE	1920- 40- 24-	OE4RGP	SP9QZ		New Hampshire		
DM4TEL	1100- 25- 22-	OE4RGP	SP9QZ		W1YOC	238,194-1203- 99-16	
DM3OG/DMA4WGG	750- 25- 15-	OE4RGP	SP9QZ		WA1PDG	78,776- 444- 86-26	
DM3WI	704- 22- 16-	OE4RGP	SP9QZ		K1CVM	74,496- 384- 97-22	
DM2CRJ	588- 20- 14-	OE4RGP	SP9QZ		N1AFC	53,632- 419- 64-10	
DM3VGO	168- 12- 7-	OE4RGP	SP9QZ		K1CZ	14,000- 36- 60-10	
DM5TG(DM5s A1G,X1G,opr)	6066- 75- 39-	OE4RGP	SP9QZ		W1WQX	7000- 100- 30- 3	
Spain		Iceland	SP9QZ		WB1CXJ	3200- 40- 40-21	
ED3AIN	225,170- 979-115-19	OE3JUR/9	SP9QZ		W1CTR	2070- 45- 23- 2	
EA2OP	112,860- 588- 95-19	SM9AQD(OH9(+SMSGMZ))	SP9QZ		KM6FC/W1(+KA1CKL,KM6FD,WB6BON)	243,040-1085-112-33	
EA2OJ	8736- 78- 56-	SP9QZ	SP9QZ		New Hampshire		
Ireland			SP9QZ		W1HCS	414,480-1872-120-36	
EI2BB	320,640-1336-120-21		SP9QZ		WA1YIV	69,056- 416- 83-21	
France			SP9QZ		WA1NIE	58,860- 317- 90-13	
F5WA	167,356- 937- 86-23	OK2KVI	SP9QZ		AC1	41,160- 293- 70- 9	
F6DCQ	125,568- 657- 96-	OK1AVX	SP9QZ		W1WVR/1	31,000- 180- 67- 31	
F6EQV	29,988- 223- 63-17	OK1AVX	SP9QZ		KA1DIR/N	27,360- 180- 50- 25	
F3AT	19,588- 150- 59- 7	OK1DKS	SP9QZ		KA1CAJ/N	20,400- 150- 51-25	
F6BVB	17,958- 219- 51-	OK1DKS	SP9QZ		W1VBX	20,240- 184- 55-27	
F6FRR	18,000- 187- 58-	OK1DKS	SP9QZ		W1ICU	18,600- 150- 62-12	
F8TQ	13,500- 125- 54-	OK1DKS	SP9QZ		WB1EIH/T	10,664- 86- 43-19	
F8TM	13,300- 125- 50-	OK1DKS	SP9QZ		W1GKJ	5484- 56- 41- 8	
F6CZO	3264- 51- 32-	OK1DKS	SP9QZ		KA1BBI/N	584- 18- 16- 6	
F9SE(OH2LU2,opr)	2804- 48- 24-	OK1DKS	SP9QZ		N1ACH	1500- 30- 35- 2	
	616- 20- 14-	OK1DKS	SP9QZ		K1GQG(+K1s AR.DG.N1EI)	600,356-2326-129-33	
England		Belgium	OS6AH	172,356- 813-106-	Guam	531,440-1816-146-36	
G5CMX(N8ET,opr)	54,162-2055-133-28	ON5AZ	166,192- 799-104-	AH2E	385,890-2029- 95-35		
G4GXL	121,952- 592-103-	ON5TEJ	109,056- 568- 96-26	White R.S.S.R.	Rhode Island		
G3ESF	78,948- 223- 48- 34-	ON4XG	98,800- 488- 95-	AH8A	141,960- 910- 78-19		
G4BUO	40,200- 300- 67- 8	ON5WL	46,350- 309- 75-12	Guam	N1ARP		
G4BUE	11,648- 104- 56- 24-	ON6NL	43,860- 255- 86-	WA1GND	53,088- 316- 84-30		
G3FJE(G4s BW1WDRS G1R,opr)	572,994-2187-131-28	ON5TZ	28,200- 188- 75-22	WB1HII	17,974- 197- 43-14		
		ON8W(W9QK,opr)	19,580- 178- 55-16	Australia	WB1HII		
				Philippines	557,056-2048-136-36		
				Indonesia	WB1GQR		
					WB1GQR	380,152-1557-122-30	
					WA1KPU	353,718-1371-125-29	
					WA1ZLD	283,360-1287-110-31	
					KA1FJ	119,884- 725- 82-16	
					W1CTM	101,268- 522- 97-21	
					KA1BEE/N	9100- 93- 35-12	
					Western Massachusetts		
					Chile		
					N1YY	462,972-1882-123-35	
					N1TZ	263,280-107-120-20	
					WA1ZAM	165,816- 846- 98-26	
					N1ATD	46,294- 275- 79-25	
					WB1HII	31,388- 267- 59-21	



EA3WZ and EA3NE spent considerable time, money and effort to go to Andorra and put C31MK on the air. Looks like Field Day, but at -12° C it sure didn't feel like it. Right: John, EA3WZ, runs some U.S. stations.



JH2ORJ likes to contest in style. Note the neat station layout.

K1IJU 8640- 91- 45- 4
W1JJP 8160- 80- 51- 6

2

Eastern New York

W2AZO 136,300- 724- 94-12
WB2KIN 65,760- 405- 80-19
WB2KCL 50,510- 322- 77-18
WA2MRW/N 120,240- 23- 8
N2AZS 35,960- 300- 58-26
K2MN 34,310- 228- 73-12
WB2OFV 29,280- 240- 61-12
N2BJG 28,586- 245- 57-25
N2FS 28,080- 216- 65-16
WB2KHE 26,880- 207- 64-20
WB2KMY 25,240- 200- 67-7
KA4DHY/2 24,800- 200- 62-10
N2BIN 22,400- 200- 56-20
KA2AOP 21,672- 218- 52-8
AA2Y 16,016- 139- 56-7
WA2RNX 10,656- 110- 48-4
WB2WLN 852,200- 98- 44-3
WB2QOH 3960- 65- 80- 8
AK2H 3300- 48- 33- 7
WB2YV(+K1PR,N2NT) 730,002-2483-147-36

AG2X(+AJ2K) KA2APS APN

DGG JBY JCA D1K/B2J

WA2OUS (266,400-1200-111-35)

New York City - L.I.

K2PE 221,328-1036-106-20

W2DKM 174,930- 832-105-25

WB2AMU 125,256- 594-102-32

K2SX 109,890- 529- 99-12

WB2ZK 84,490- 497- 85-36

WB2WJH 79,958- 407- 97-17

WA2SEL 45,420- 207- 73-1

WB2DLA 30,160- 225- 65-22

N2GC 22,848- 200- 56-10

AC2P 20,060- 170- 59-12

WA2SVT 19,592- 158- 62-13

WB2ZL 15,846- 139- 57-11

WB2DPI 14,780- 80- 80-20

KA2ETG 13,524- 100- 47- 6

WB2PXA 11,040- 120- 46- 5

K2HTO 5544- 77- 36- 5

KA2DIV 3168- 50- 24- 8

WB2PLT 2048- 64- 16- 2

WB2QUE(Multiop) 140,220- 613-114-21

KA2ELW(+WB2PNV) 123,740- 538-115-36

N2ALD(+WA2RQY) 97,006- 533- 91-15

Northern New Jersey

WB2WIK 255,794-1032-121-35

WB2QYT 231,752- 982-118-26

WB2YOF 205,184- 903-112-24

N2AA 164,120- 730-110-26

AF2L 149,040- 803- 92-19

WB2NHA 148,800- 680-102-21

WB2QK 135,548- 89- 99-44

W2RQ 110,352- 627- 88- 9

WB2LDN 100,608- 523- 96-30

K2UFM 94,000- 500- 94-15

K2JT 74,948- 453- 82-12

WA2OVS 52,688- 355- 74- 6

WA2OFC 45,200- 299- 71-1

WB2RNZ 47,788- 70- 79-11

K2PF 43,664- 260- 82-12

WA2JHN/N 32,240- 206- 62-21

KA2CS1/N 30,120- 209- 60-15

WB2SXT 21,518- 203- 53-14

WB2TOM 18,920- 172- 55-14

WD2AJJ 16,632- 154- 54- 8

WB2NLT 16,380- 108- 71-17

WB2NKT 15,240- 136- 49- 6

WA2LTS 13,364- 36- 46-22

WB2GJD 12,480- 115- 52-12

WA2PQU 11,750- 125- 47-

W2CC 10,100- 101- 50- 5

WA2UDT 8814- 104- 39-24

WB2NLT 7632- 106- 36- 5

WB2NCF/7 8732- 107- 57- 6

WB2EGI(+WA2PID,WB2RTF-TSY) 262,406-1042-121-34

K2XR(+K2WNR, N2ADH) 256,586-1177-109-34

WB2JGP(+WB3LB) 6,600- 581-100-32

WB2RLB(+N2BQ,W2KY) 81,356- 469- 86-26

WB2FOU(+AD2K) 13,104- 156- 42- 7

Southern New Jersey

WB2HK 214,926- 951-113-22

WA2AUW 59,752- 388- 77-30

W2GTN 18,422- 151- 61-13

K2HPY 15,904- 135- 56-8

WB2H 13,100- 130- 49-26

WB2HIE/B 12,710- 128- 42-2

WB2H 8924- 97- 46- 6

WA2C UW 4416- 55- 32- 5

WB2AW 4320- 60- 30-24

N2CQ 4148- 61- 34- 2

KB2LQ(Multiop) 2296- 41- 28- 4

2296- 41- 28- 4

Western New York

WA2MMN 110,210- 515-107-22

KB2HF 95,232- 512- 93-19

KA2HDY 95,178- 528- 87-26

WB2FTY 92,644- 437-106-23

KB2DE 56,144- 319- 88-18

WA2EYA 48,516- 311- 78-18

N2AOA 44,660- 319- 70-24

N2ALK 43,120- 176- 70-19

WB2LZ 30,375- 108-105-10

WB2LW 30,372- 108-105-10

WB2MWB 36,840- 307- 60-25

K2XU 36,310- 251- 71-13

WB2TKD 32,400- 225- 72-36

KA2CZO 31,812- 241- 66-20

WB2K 30,184- 212- 62- 9

WB2KAF 16,968- 202- 42- 6

WB2ZEL/T 20,690- 180- 50-20

WB2UNX 13,190- 115- 59- 6

WB2NLR 12,712- 144- 44- 5

WB2GLD 11,782- 136- 43-15

WB2FUI 11,424- 113- 48-28

WB2E 11,388- 136- 39-3

WA2EZR 9,108- 138- 33- 8

WA2EYL 8,908- 188- 34-13

WB2YVG 5152- 89- 28-14

WB2IMG 3000- 50- 30- 4

N2ARG 2828- 54- 26- 7

AK2O 630- 17- 15- 3

WB2PSI(K2R5) 20,220- 180- 50-20

WB2PSI(WA2E) 23,560- 101-114-29

WA2IKO(+WB2PGU) 205,794- 917-111-32

K2QIE(K2ADJ,WA2PHF, WA2WWSV,ops) 203,148- 891-114-30

WA2ZFW(+KA2ABA) 40,000- 250- 80-20

3

Delaware

WB2BCP 270,816-1092-124-23

K2ABC 158,508- 777-102-16

K3CNH 15,694- 133- 59-10

WB2BZT/T 2584- 50- 17- 8

AC3T 160- 25- 13- 1

4

Alabama

K4ZGB 163,590- 779-105-22

N4KG 119,340- 510-117-11

K4IQJ 48,250- 313- 75-15

N4NAID 5508- 81- 34- 9

K4ABZY 2640- 60- 22- 3

WA4MGJ 806- 31- 13- 2

Georgia

K4BAI 116,594- 599- 97-14

WD4HER 79,112- 638- 62-20

K4HAV 54,796- 264-103-14

WA4EMA 51,408- 304- 84-14

K4LDI 43,624- 286- 76-20

K4K 36,261- 301- 73-30

WB4NWS 31,098- 219- 71-20

WB4NWS(+WA4OYH) 207,872- 891-116-35

WA4QVM(+WD4EBB) 19,300- 193- 50-15

5

Kentucky

WA4QKV 287,212-1217-118-27

WB4QMQ 205,428- 901-114-28

WA4QPM 85,850- 429-100-21

K4JYV 13,300- 358- 99-19

K4AFBZ 27,502- 103- 67-2

WA4NOH 24,050- 156- 65-24

WB4YOK 23,684- 171- 62- 7

WB4ASZ 18,216- 198- 46-20

WB4TKJ 18,124- 195- 46-13

WA4DAG 33,060-1281-130-28

KB4OB(+WD4NES) 65,404- 394- 83-23

6

Arkansas

N4SDY 31,784- 274- 50-20

AD5F 18,300- 181- 50-12

WA5CND 10,080- 120- 42-20

WSEIJ 1476- 41- 18- 3

WB5FDN/(+WD5BKA) 34,080- 284- 60-22

K5VVR(+WD5HQT) 24,700- 245- 50-10

7

Louisiana

WB5WNU 648,900-2571-126-36

WB5SSK 224,400- 395-120-29

WB5WQG 72,226- 450- 77-26

WA6KYO 63,480- 331- 92-24

WB6OWD 58,608- 363- 74- 5

WB5DIX 30,800- 279- 55-19

WB5DTD 10,250- 237- 44-13

WB5DT 20,856- 211- 22- 11- 2

K4EM 136,640- 610-112-29

K4GSO (WA4UES, WWW, WA4A5) EQZ HQC, WB4RZH, WD4CND PQN RJ, ops) 10,016- 572- 96-33

WB4IIO/(WA3YVM, WB4FU) 31,680- 255- 60-16

K4HML(+WB4LQB, WB4YPS) 10,582- 143- 37-14

8

Mississippi

WB5WQH 116,844- 749- 78-19

WB5AQ 47,424- 304- 78-22

WB5NCB 15,984- 148- 54- 24

K4STD 10,668- 127- 42-14

WB5DBOL(+WB4HOZ) 61,650- 411- 75-23

9

South Carolina

WB4TLX 156,368- 674-116-34

K4RV 48,960- 340- 72-24

N2B/5 70,638- 579- 61-22

DK5WV/W 52,186- 527- 59-15

WB5GWN 41,088- 428- 48- 17

WB6OHO/5 17,888- 177- 43- 2

K4STD/5 12,240- 140- 34-11

K4STD/4 10,211- 107- 29- 4

WB5JMA/N 10,630- 208- 24- 6

W6V6L(K6TXA,N3AYL, WA2HSK,WA65 DQ EM HJK, opr) 372,816-126-108-28	AD7L 50,370- 345- 73-14 WB7ZQH 48,734- 401- 59-17 K7EAU 44,330- 403- 55-25 WB7BZS 33,930- 386- 65-22 W7RJR 27,232- 184- 74-15 WB7SQM 26,936- 255- 52-13 WB7WPV/N 24,380- 213- 46-18	WBLCY 16,576- 148- 56-16 WFBN 13,524- 147- 36-5 WB7NSD 12,000- 125- 36-5 WB7WT 10,000- 104- 48-10 WB7US 10,560- 110- 48-10 K8DL 8944- 104- 43- 8 WB8LX 2505- 75- 55- 6 KA8BZM 8050- 115- 35- 6 WB8LXP 4950- 75- 33- 8 WB8LXN 4950- 70- 32- 4 WB8NJM 4460- 70- 32- 4 A18K 3780- 63- 30- 1 KA8CEK/N 3500- 54- 25-10 K8MR 3130- 48- 21- 1 WB8NPF 2184- 42- 26- 7 N8AXA 2176- 34- 32- 1 WB8LX 1520- 40- 19- 6 AG8J 870- 15- 15- 1 KA8CXA/N 114- 14- 15- 1 KA8Z(+K8 MR NS,N8AA,W85 HSK K/C,W8BPHI,WDBALG) 540,994-1990-13-35	WBEE(N9ARN,WB#9 QLU SND UEX,opr) 298,080-1296-115-30		
Santa Barbara N5TR 589,680-2519-117-31 WB6LQ 186,120- 100- 11- 1 WA6NHB 55,132- 358- 77-18 WA6VNN 54,810- 412- 63-28 WA6DJS 46,920- 340- 67-10 WA6IGU 27,328- 189- 56-15 KA6GU/N 13,098- 117- 37-23 WB7PQU(+K7WPC) 352,880-2005- 88-28 WB7WV(W6HWS,K7s TDX,ZFG, W7IEO,WATVNS,WB7C VDH, opr) 266,640-1320-101-26	W7NES 19,035- 146- 45-14 WB7WQE 11,136- 97- 48-10 KA7EXM/N 9240- 100- 35- 4 WB7WV 4680- 56- 30- 7 KA7DHD 4260- 53- 40- 2 WA7OEM 200- 15- 2 WB7HTR/T 2014- 39- 19-11	WBLCY 16,576- 148- 56-16 WFBN 13,524- 147- 36-5 WB7NSD 12,000- 125- 36-5 WB7WT 10,008- 139- 36-11 WB7HTR/T 2014- 39- 19-11	Wisconsin W9OP 229,104-1022-111-24 K9DAF 202,404- 991-101-20 N9ACP 111,090- 529-105-28 WD9DEE 99,704- 484-103-20 WB9SV 93,258- 471- 99-23 WB9D9C 66,516- 476- 69-18 WA9KLM(A9T,opr) 44,880- 340- 66-20	WBEE(N9ARN,WB#9 QLU SND UEX,opr) 298,080-1296-115-30	
Santa Clara Valley N6BT(WA6EV,opr) 633,556-2618-121-34	Utah N7DF 700,348-2894-121-27 WA7HQD 211,464-1188- 89-20	WB8RCN(+KA4DCZ,K8III, K8CX(K3 LR V) WB8LX 168,060-2870-119-28 WB8FP(+KA8CF,K8BHN,N8 AJX ALN,WB8ZJY,WB8S CJQ KMX ROD) 350,416-1446-121-32 WB8VX(K7LJ,WB8NNQ,opr) WB8LX 218,132- 20- 34-34	WB9GGD 45,678- 270- 66- 9 WA9BZW 23,800- 270- 70-19 W9HE 15,694- 133- 59- 5 WB9HGS 11,316- 137- 41-12 WA9YRL 11,236- 106- 53-19 KA9DSH/N 10,480- 87- 40-18 WB9OBX 9760- 122- 40-18 WB9LX 850- 150- 39-10 N9ACP 5500- 100- 30- 1 WB9NRK 5100- 38- 30-1 K9GDF 4964- 73- 34- 2 WB9DZ 2852- 62- 23- 7 WB9VZ 2816- 49- 22-23 WB9CT 1560- 30- 26- 7	WB9EGZ(+WB9X) 306,240-1391-110-28 W9YTF(AC9C,K9ACRD,WB9PV opr) 221,200-1106-100-36 WB9UBM(+KA9CH) 175,240- 674-130-32 K9EAM(K9CN,WB9WXW,WD9s KA8 EGE,opr) 148,860- 827- 90-36 WB9GF(+WB9UGX) 19,600- 200- 49-13	WB9EGZ(+WB9X) 306,240-1391-110-28 W9YTF(AC9C,K9ACRD,WB9PV opr) 221,200-1106-100-36 WB9UBM(+KA9CH) 175,240- 674-130-32 K9EAM(K9CN,WB9WXW,WD9s KA8 EGE,opr) 148,860- 827- 90-36 WB9GF(+WB9UGX) 19,600- 200- 49-13
N6RZ(WB6SHS,opr) 334,324-2667-111-27	Washington N7XX(AH6Z,opr) WB7R 663,060-2870-119-28 WB7R 614,998-2584-119-28 WB6HGH 48,618- 333- 73-15 WB6YVK 16,644- 146- 57-12 WB6MTJ 7104- 96- 37-10 KA7FXS 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 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25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 N7AME 12,672- 144- 44- 7 WB7YK 10,706- 101- 53- 8 AB7M 6370- 81- 35- 6 WA5ZQK/7 3600- 60- 30- 3 K7RS 3264- 51- 32- 2 WB7RH 25,212- 49- 28- 3 K7LXC 138,348- 820- 81-24 WB7WV 54,432- 432- 63-12 WB7WV 36,088- 336- 52-16 WB7WU 31,808- 284- 56-12 WB7PZ 25,620- 292- 56-12 WB7STA 25,272- 292- 56-12 WB7WB 21,420- 210- 51- 4 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